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East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2044

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CEMA ATTITUDE ON EEC PARTICIPATION VIEWED

Budapest MAGYAR HIRLAP in Hungarian 25 Jul 80 p 7

[Report by Sandor Nedeczky: "What Is the Topic of the Talks Between the CEMA and the EEC? A Clear Picture of the Situation"]

[Text] The two European organizations have been meeting for some time. The press and the official circles of the CEMA countries have limited their discussion up until now to the significance of the talks, and urged resolving differences of opinion in the name of mutual amenableness. Precisely in order to guarantee the undisturbed continuation of the present talks, certain circles refrained from criticizing certain stands of the EEC. Not so the press of the EEC. There, on the basis of detailed information--which was leaked on some details of the talks that are otherwise considered confidential--a conscious propaganda activity is taking place to influence public opinion. It is no accident that this so happens, for the EEC's delegation repeatedly refers to this manipulated, misinformed and preconceived public opinion in order to force its conceptions and will on the delegations of the CEMA and its member states.

The organs of the press and propaganda and certain representatives of the European Parliament are not sparing of destructive and provocative statements either. In these cases, the official representatives of the EEC refer to freedom of the press, freedom of speech and the immunity of parliament representatives, and say that these are only the opinions of the press or individual persons and politicians. They, that is, the EEC, have no sinister intentions at all and it is not their objective to undermine the unity of the CEMA and the socialist countries.

Still, there are two things apparent to the unbiased observer. One of them is that the EEC's official organs, the much advertised committee and its president and political executive responsible for foreign relations, and the Council of Ministers or its president have not found it necessary up to now to distance themselves publicly and officially from these irresponsible statements. The other striking phenomenon is that the delegation of the EEC represents views which seem to serve the above-mentioned political and provocative goals. This is possibly only accidental.

but perhaps not. For this reason it is important, then, to give a clear picture to the public. This is the objective of the few thoughts below.

Recognition, Lack of Recognition

This question was for a long time the focal point of the disagreement between the CEMA countries and the EEC. The Western propaganda that accompanies the present talks gives this an appearance that the CEMA countries, too, have finally accepted and recognized this reality which has been accepted and recognized by every other nation. The everyday use of language does not differentiate between acceptance and recognition. Interstate relations, however, take the form of rights and obligations, and there is a great difference between a country's acceptance of something--i.e., the recognition of a fact--and the recognition of something in an appropriate form--i.e., legal acceptance. The former is the given country's own sovereign will and act, with no obligation. The latter is an act agreed upon by contract, therefore it obliges. The EEC, they say, is a reality. This is true. This reality, however, has several aspects, especially if we view it from our own economic and political interests. The fact, for instance, that the EEC is a customs union, i.e., there are no duties between its own countries, and that it has external customs tariffs, is an absolute fact that "must be recognized." But such customs union affects the interests of other countries as well, for duties afflict the prices of these countries when they enter the EEC's customs area. Thus, in order to recognize customs unions by international law, it is not enough to state the fact that a customs union has been created, but it also must be stated whether and to what extent the given customs union has fulfilled the obligations that are set in international contracts. From this aspect, the EEC's customs union character has not been entirely and legally recognized. This is so not because of the CEMA countries' attitude but because of the reservations of the EEC's most important trade partners.

It must be noted at the same time that the EEC's customs union character was de facto recognized by all of its important trade partners.

Economy and Politics

The EEC is not only a customs union but also an economic union, and a joint noncustoms-policy was established in certain sectors such as agriculture (for in the area of agriculture, there are still customs-like levies between individual EEC countries). The United States, for example, did not recognize this joint agricultural policy for a long time. Legal recognition came about only in 1979 during the GATT conference, and it had its price, of course. All of this illustrates that there is a significant difference between recognition and acceptance; this difference is not only formal but affects economic interests.

In addition, the EEC is not only an economic but also a political union. This was never denied by the EEC itself; on the contrary, it openly

proclaims it even today. The only time it keeps bashfully quiet about it is when it directs its propaganda toward the socialist countries. It is only us they want to make believe that they are only an economic organization or integration. Their argument for a long time was that you and I are both integrations, you cannot blame us for anything.

If we take a glance at the so-called Pact of Rome which created the EEC, we will see that all of its pores smell of politics. It commits its member states not only to implement the so-called free economy (this elicited the criticism of the socialist and communist parties of certain EEC countries; these parties are talking about the Europe of the monopolies) but also to engage in foreign policy. One of the signs of this is that the Pact of Rome that created the EEC reflects a situation which corresponds to the situation before the agreements between the two Germanys. With reference to West Berlin, it contains orders which cannot be guaranteed to be in harmony with the relevant four-power agreements.

Thus, he who confers with the EEC must also consider the political reality. But this is not tantamount with the legal acceptance of these and with giving up our own interests. This is why we must talk about it and this is why the conferences are taking place.

In addition to this, the EEC also created a joint trade policy. The essence of this that is relevant to us is that it is the EEC that acts and makes contracts in the name of and instead of the member states. But the Pact of Rome also states that this does not affect the earlier contracts of the individual countries either from the aspect of rights or from that of obligations. This is the way it happened, with the exception of certain socialist countries. Some EEC countries canceled the earlier contracts with them which contain, among other things, most-favored-nation treatment--which means the minimum of normal relations. This is how they wanted to force the socialist countries to "recognize" the EEC unconditionally and regardless of their interests. It must be noted that this did not happen in our case. Obviously because, as a signatory, we made contracts with all EEC countries and with the EEC itself for most-favored-nation status, which is unconditional and cannot be canceled.

Separate Contracts?

After this came a much-advertised proposal that every single socialist country should sign a separate contract with the EEC. This contract scheme (schema d'accord) was greatly supported by propaganda. They made it to appear as if it were a constructive step; however, the propaganda, the press and certain politicians talked about other things as well. They argued that this contract was beneficial for the smaller socialist countries because they would be thus freed from CEMA's straitjacket and might receive special benefits. This objective was never refuted by the official organs of the EEC and the governments of the member states. The behavior of the CEMA countries in this matter was cautious. The EEC's

propaganda viewed this with a wonder full of resentment. Here you are, an outstanding opportunity, an advantageous proposal, and they do not even reply. We can only wonder at this wonder. Or some people thought that we were not aware of their intentions, or thought that we could not wait to fall into the embracing arms of the EEC, an organization which in the meantime loudly proclaims that it does not want to regulate its relations with the socialist countries on the basis of the most-favored-nation treatment and lack of discrimination.

CEMA and its member states in turn made a proposal in 1975 that the two organizations should begin talks with consideration of their own areas of competence. The talks are being conducted on this basis.

9414
CSO: 2500

YUGOSLAV-HUNGARIAN COMMODITY TRADE LISTS FOR 1979

Belgrade MEDJUNARODNI UGOVORI (supplement to SLUZBENI LIST SFRJ) in Serbo-Croatian No 8, 17 Jul 80 pp 310-314

[Commodity lists from trade protocol ratified 6 April 1979 in Belgrade by the Federal Executive Council and signed by FEC chairman Veselin Djuranovic]

[Text] List A/1979. Exports From the People's Republic of Hungary to the Socialist Federal Republic of Yugoslavia, in thousands of dollars U.S.

No 1	Designation 2	Unit of Measurement 3	Quantity 4	Value 5
1	Machines, equipment, road and rail vehicles, instruments, products of the electronic industry, volume products of machinebuilding, and components	Dollars		71,000
	Breakdown:			
	Cooperation in the production of highway vehicles and in the motor industry	"		30,000
	Other cooperation in industrial production	"		5,000
	Electric motor trains	"		10,000
	Mechanical equipment for locomotives and parts for rail vehicles	"		1,000
	Port equipment (cranes and parts)	"		1,000
	Machinery and equipment for the Danube-Tisa-Danube Canal	"		6,000
	Machine tools	"		2,000

List A/1979 (continued)

1	2	3	4	5
	Agricultural machines and equipment for the food processing industry	Dollars		2,000
	Equipment for the electrical products industry, lamp parts and other components	"		5,000
	Parts for highway vehicles and garage equipment	"		4,000
	Miscellaneous instruments and components	"		1,000
	Tools and products of the metal manufacturing industry	"		4,000
2	Long-term cooperation			
	Pulpwood for Djuro Salaj of Krsko	Cubic meters (stacked)	280,000	
	Pulpwood for Matroz of Sremska Mitrovica	"	97,000	
	Ammonia for the Bor Mine and Smeltery, Generaleksport of Belgrade	Tons	27,500	
	Ammonium sulfate for the Bor Mine and Smeltery, Generaleksport of Belgrade	"	17,000	
	Carbamide for the Bor Mine and Smeltery, Generaleksport of Belgrade	"	17,000	
	PVC pellets for the Bor Mine and Smeltery, Generaleksport of Belgrade	"	4,200	
3	Products of ferrous metallurgy	"	66,000	
4	Exchange of products of ferrous metallurgy	Dollars		20,000
5	Products of electrometallurgy	"		2,700
6	Ethylene	Tons	10,000	
7	Propylene	"	10,000	
8	Polypropylene	"	6,000	
9	Sulfuric acid	"	60,000	
10	Synthetic resins	"	1,700	
11	Sodium hydroxide	"	20,000	
12	Butyl and isobutyl acetate	"	1,200	
13	Creosote for impregnating wood	"	4,000	
14	Ammonia	"	50,000	
15	Chemicals for plant protection	Dollars		500

List A/1979 (continued)

1	2	3	4	5
16	Carbamide	Tons	20,000	
17	Motor vehicle tires and industrial rubber	Dollars		2,000
18	Miscellaneous chemical products	"		3,000
19	Drugs, raw materials for the pharmaceutical industry and laboratory raw materials	"		2,500
20	Propane-butane	Tons	40,000	
21	Gasoline, reformed	"	10,000	
22	Blown oils	"	6,000	
23	Paraffin	"	2,000	
24	Finishing in the petroleum industry	Dollars		1,800
25	Silica sand	Tons	45,000	
26	Molding sand	"	8,000	
27	Perlite	"	15,000	
28	Cement	"	160,000	
29	Pulpwood	Cubic meters (stacked)	50,000	
30	Miscellaneous products of the lumber and paper industries	Dollars		2,000
31	Consumer goods	"		13,000
	Breakdown:			
	Textile products	"		6,500
	Housewares, camping furniture and camping supplies	"		4,000
32	Books, films and other products of printing and publishing	"		1,000
33	Raw and processed foods (including vegetable oils)	"		10,000
34	Border trade	"		9,500
35	Services (carriage, tourism, etc.)	"		54,000

List B/1979. Exports From the Socialist Federal Republic of Yugoslavia to the People's Republic of Hungary, in thousands of dollars U.S.

No	Designation	Unit of Measurement	Quantity	Value
1	2	3	4	5
1	Machines, equipment, road and rail vehicles, instruments, products of the electronic industry, volume products of machinebuilding, and components	Dollars		65,000

List B/1979 (continued)

1	2	3	4	5
	Breakdown:			
	Cooperation in the production of highway vehicles and in the motor industry	Dollars		30,000
	Other cooperation in industrial production	"		5,000
	Power engineering equipment, equipment and parts manufactured by the electrical products and electronics industries (including storage batteries)	"		5,000
	Construction and mining machines and parts	"		500
	Pumps	"		2,600
	Machine tools	"		1,000
	Agricultural machines and equipment for the food processing industry	"		1,800
	Parts for ships and cranes	"		1,000
	Parts for highway vehicles and garage equipment	"		4,000
	Parts for railroad cars	"		1,300
	Industrial fittings and couplings	"		5,800
	Tools and products of the metal manufacturing industry	"		7,000
2	Long-term cooperation			
	Cellulose for Lignimpex of Budapest (Djuro Salaj of Krsko)	Tons	40,000	
	Cellulose for Lignimpex of Budapest (Matroz of Sremska Mitrovica)	"	13,000	
	Monobasic ammonium phosphate for Chemolimpex of Budapest (Bor Mine and Smeltery)	"	70,000	
	Triple superphosphate for Chemolimpex of Budapest (Bor Mine and Smeltery)	"	100,000	
3	Ferroalloys (ferrochromium, ferromanganese and ferrosilicon)	"	5,000	
4	Castings	Dollars		1,000
5	Products of ferrous metallurgy	"		2,500
6	Exchange of products of ferrous metallurgy	"		20,000

List B/1979 (continued)

1	2	3	4	5
7	Coke	Tons	50,000	
8	Copper and semifinished copper products	Dollars		4,500
9	Lead	Tons	2,400	
10	Zinc metal	"	5,000	
11	Metallic silicon	"	600	
12	Cable	Dollars		500
13	Raw materials for polyurethanes, including polyols	Tons	2,000	
14	Nitrogen-phosphorus-potassium fertilizers	"	50,000	
15	Monobasic calcium sulfate	"	5,000	
16	Tribasic sodium phosphate	"	2,000	
17	Zinc oxide	"	1,000	
18	Methanol	"	8,000	
19	Boric acid	"	1,000	
20	Titanium dioxide	"	400	
21	Chemicals for plant protection	Dollars		1,500
22	Low-density polyethylene	Tons	5,000	
23	Motor vehicle tires and industrial rubber	Dollars		2,000
24	Miscellaneous chemical products	"		2,000
25	Drugs, pharmaceutical and laboratory raw materials	"		1,000
26	Barite	Tons	12,000	
27	Alumina	"	7,000	
28	Miscellaneous products of the nonmetallic minerals industry, including refractory material	Dollars		1,500
29	Slaked lime	Tons	30,000	
30	Beech lumber	Cubic meters	10,000	
31	Railroad ties	"	10,000	
32	Miscellaneous products of the paper industry	Dollars		1,300
33	Cigarette paper	Tons	600	
34	Rayon cord	"	500	
35	Polyester fiber	Dollars		2,000
36	Textile finishing	"		1,500
37	Consumer goods	Dollars		13,000
	Breakdown:			
	Textile products	"		6,500
	Housewares	"		4,000
38	Books, films and other products of the printing and publishing industry	"		1,000

list B/1979 (continued)

1	2	3	4	5
39	Raw and processed foods, including deliveries on the basis of the Danube-Tisa-Danube Canal and tobacco	Dollars		9,500
40	Border trade	"		9,500
41	Services (carriage, tourism, etc.)	"		83,000

List C/1979. Exports From the People's Republic of Hungary to the Socialist Federal Republic of Yugoslavia Under the Exchange of Goods, Services and Economic Cooperation in Border Trade, value in thousands of dollars U.S.

No	Designation	Value
1	2	3
	Industrial consumer goods	3,100
1	Metal housewares and small farm machinery	800
2	Housewares made of synthetics, chemical products and cosmetics	200
3	Glass products, including glass bottles	400
4	Light bulbs	100
5	Textiles	800
6	Housewares	100
7	Exchange between department stores	700
	Agricultural products and foodstuffs	2,750
8	Eggs for hatching	300
9	Poultry for the food processing industry	1,000
10	Leguminous vegetables (peas, buckwheat, sorghum seed, etc.)	400
11	Alcoholic beverages in bottles	50
12	Miscellaneous agricultural products and foodstuffs	1,000
	Building and other materials	1,650
13	Building materials for flood control	1,450
14	Limestone for the sugar industry	200
	Production cooperation (finishing and services)	400
	Fair exhibits	100
	Exchange of consumer goods under the general contract between Konsumex and the Pomurke Agroindustrial Combine	1,500

List D/1979. Exports From the Socialist Federal Republic of Yugoslavia to the People's Republic of Hungary Under the Exchange of Goods, Services and Economic Cooperation in Border Trade, value in thousands of dollars U.S.

No 1	Designation 2	Value 3
	Industrial consumer goods	4,300
1	Metal housewares and industrial goods (electrical products, tools, bicycles, etc.)	800
2	Chemical products and cosmetics	900
3	Footwear	200
4	Soles and patterns	100
5	Sporting goods and toys	100
6	Textiles	800
7	Housewares	500
8	Motor vehicle tires	200
9	Exchange between department stores	700
	Agricultural products and foodstuffs	3,100
10	Canned foods	200
11	Chestnuts	200
12	Beer	2,500
13	Cigarettes	150
14	Liquor	50
	Building and other materials	100
15	Hydrated lime and tiles	100
	Production cooperation (finishing and services)	400
	Fair exhibits	100
	Exchange of consumer goods under the general contract between the Pomurke Agroindustrial Combine and Konsumex	1,500

7045
CSO: 2800

YUGOSLAV-CZECHOSLOVAK COMMODITY TRADE LISTS FOR 1979

Belgrade MEDJUNARODNI UGOVORI (supplement to SLUZBENI LIST SFRJ) in Serbo-Croatian No 8, 17 Jul 80 pp 315-317

[Commodity lists from trade protocol ratified 31 May 1979 in Belgrade by the Federal Executive Council and signed by FEC chairman Veselin Djuranovic]

[Text] List A/1979. Exports of Commodities From the Socialist Federal Republic of Yugoslavia to the Czechoslovak Socialist Republic

No 1	Designation 2	Unit of Measurement 3	Quantity 4	Value, 000 $ 5
1	Raw and processed foods, including fresh fruit, vegetables, prunes and seed			5,000
2	Canned fish			3,500
3	Tobacco and tobacco manufactures			10,000
4	Wine			1,000
5	Sorghum straw			1,500
6	Veneer and panelboard	Cubic meters	10,000	
7	Lumber	"	1,500	
8	Miscellaneous paper, cardboard and paper containers			1,000
9	Bauxite	Tons	150,000	
10	Chromium ore concentrate	"	10,000	
11	Electrolytic zinc	"	5,500	
12	Zinc dust	"	6,000	
13	Castings of zinc alloys	"	300	
14	Rolled and drawn aluminum products, including aluminum tube	"	2,000	
15	Rolled and drawn copper and brass products	"	500	
16	Nonferrous metal fittings			2,000

List A/1979 (continued)

1	2	3	4	5
17	Miscellaneous chemical raw materials and products, including dibasic calcium phosphate and exchange of chemical products			17,000
18	Miscellaneous pharmaceutical raw materials, products and drugs, including veterinary preparations			5,500
19	Deliveries under a specific contract			6,300
20	Products of the electrical equipment industry, including telephone cable			9,500
21	Passenger cars	Units	2,000	
22	Machines, including machine tools, equipment and parts and agricultural machines			45,000
23	Railroad cars, tanks and parts for railroad cars			5,000
24	Parts and accessories for motor vehicles			7,500
25	Gears			12,000
26	Tools and instruments			4,000
27	Miscellaneous metal products, including plumbing fittings, antifriction bearings, typewriters, etc.			3,000
28	Castings and forgings			7,200
29	Storage batteries			3,000
30	Motor vehicle tires and industrial rubber			5,300
31	Exchange of products of ferrous metallurgy			15,000
32	Textiles and textile products			16,000
33	Hemp and tow			1,200
34	Footwear and leather products			5,000
35	Consumer goods, including housewares			14,000
36	Viscose fiber, polyols and polyurethane products	Tons	3,000	
37	Electrocorundum			2,000
38	Books, films and printing and publishing services			500
39	Exchange of building materials, including asbestos-cement products			5,000

List A/1979 (continued)

1	2	3	4	5
40	Construction of building projects and construction services			35,000
41	Transportation services, including petroleum pipeline			50,000
42	Tourism			18,000
43	Miscellaneous invisibles			9,000
44	Deliveries related to industrial cooperation			50,000
45	Deliveries related to the Danube-Tisa-Danube contract			5,400
46	Deliveries under the NK [expansion unknown] contract			10,000
47	Deliveries related to the Jadran Department Store			1,000
48	Cooperation in agriculture: UPI of Sarajevo, AGROKOMERC of Velika Kladusa, and others, with TRANSAKT of Prague			2,000
49	Electric power			6,000
50	Deliveries under the contract between KTK [expansion unknown] of Visoko and METALIMEX of Prague			10,700
51	Miscellaneous			2,000

List B/1979. Exports of Commodities From the Czechoslovak Socialist Republic to the Socialist Federal Republic of Yugoslavia

No	Designation	Unit of Measurement	Quantity	Value, 000 $
1	2	3	4	5
1	Coking coal	Tons	600,000	
2	Rolled and drawn products of ferrous metallurgy, including semifinished products	"	110,000	
3	Miscellaneous products of ferrous metallurgy			5,000
4	Machines and equipment, including machine tools, 3,000 tractors, electrical equipment and other capital goods			95,000
5	Miscellaneous products of the electrical products industry			1,500
6	Miscellaneous metal products			2,000
7	Trucks and special vehicles			14,000

List B/1979 (continued)

1	2	3	4	5
8	Passenger vehicles	Units	7,500	
9	Parts for highway vehicles and tractors			8,000
10	Parts for railroad cars			1,000
11	Antifriction bearings			3,000
12	Tools and instruments			4,000
13	Deliveries under the special contract			8,200
14	Miscellaneous pharmaceutical raw materials and products			1,500
15	Miscellaneous chemical raw materials and products, including monoethylene glycol and exchange of chemical products			19,000
16	High-density polyethylene	Tons	5,000	
17	Polypropylene	"	5,000	
18	Synthetic rubber	"	1,500	
19	Tires and industrial rubber, including tires for construction machines			8,000
20	Raw and fired clay	Tons	24,000	
21	Kaolin	"	35,000	
22	Cement	"	50,000	
23	Exchange of building materials, including asbestos-cement products			5,500
24	Glass products			3,500
25	Glass wool			1,700
26	Exchange of products of ferrous metallurgy			15,000
27	Textiles, footwear and intermediate products			22,500
28	Consumer goods, including musical instruments and sporting goods			16,000
29	Wood products			5,400
30	Pulpwood			6,000
31	Miscellaneous paper, including kraft paper and scrap paper			3,000
32	Books, films and printing services			500
33	Deliveries under industrial cooperation			50,000
34	Deliveries under the Danube-Tisa-Danube contract			500
35	Deliveries under the NK [expansion unknown] contract			14,000

List B/1979 (continued)

1	2	3	4	5
36	Deliveries under the aluminum contract			16,000
37	Cooperation in agriculture between UPI of Sarajevo, AGROKOMERC of Velika Kladusa, and others, on the one hand, and TRANSAKT of Prague on the other			15,000
38	Tourism			3,000
39	Transportation services, including gas pipeline			20,000
40	Deliveries under the contract between KTK [expansion unknown] of Visoko and METALIMEX of Prague			10,700
41	Miscellaneous			8,000

7045
CSO: 2800

YUGOSLAV-BULGARIAN COMMODITY TRADE LISTS FOR 1979

Belgrade MEDJUNARODNI UGOVORI (supplement to SLUZBENI LIST SFRJ) in Serbo-Croatian No 8, 17 Jul 80 pp 318-321

[Commodity lists from trade protocol ratified 31 May 1979 in Belgrade by the Federal Executive Council and signed by FEC chairman Veselin Djuranovic]

[Text] List A/1979. Exports From the People's Republic of Bulgaria to the Socialist Federal Republic of Yugoslavia

No 1	Commodity Designation 2	Unit of Measurement 3	Quantity or Value 4
1	Forklift trucks (electric and internal combustion)	000 $	2,500
2	Electric hoists	"	400
3	Spare parts for forklift trucks	"	500
4	Greenhouses	"	6,000
5	Irrigation and drainage systems	"	4,000
6	Metal fabrications	"	6,000
7	Diesel engines	"	100
8	Battery separators and elements	"	1,000
9	Rakes	"	100
10	Agricultural machines and spare parts	"	1,000
11	Miscellaneous machines, equipment and mutual deliveries under cooperative arrangements	"	4,000
12	Cooperation in the production of washing machines	"	500
13	Products of the electronics and electrical equipment industries	"	2,000
14	Complete equipment for warehouses	"	1,000
15	Metal- and woodworking machines	"	500
16	Bearings	"	150

List A/1979 (continued)

1	2	3	4
17	Fifth wheels and parking wheels for trailers	000 $	500
18	Cables and conductors	"	200
19	Exchange of products of ferrous metallurgy	"	8,000
20	Processing of aluminum	"	4,000
21	Processing of nonferrous metals and semi-finished products	"	1,000
22	Products of nonferrous metallurgy	"	700
23	Metal products (special shapes for electric and gasoline forklift trucks)	"	2,000
24	Hot rolled strip	"	80
25	Tinplate	Tons	3,000
26	Lead	"	5,000
27	Zinc in ingots	"	2,000
28	Scrap iron	000 tons	30
29	Sodium nitrate	Tons	2,000
30	Sodium nitrite	"	500
31	Carbon disulfide	"	2,000
32	Tribasic sodium phosphate	"	3,000
33	Ammonia	000 tons	5
34	Ammonium sulfate	"	15
35	Carbamide	"	20
36	Borax	Tons	200
37	Paraffin	"	2,000
38	Acetone	"	2,000
39	Ethylene oxide	"	1,000
40	Acrylonitrile monomer	000 tons	10
41	Styrene monomer	Tons	200
42	Red lead oxide	"	600
43	Litharge	"	300
44	Diethylene glycol	"	300
45	Phenol	"	2,000
46	Propylene	"	1,000
47	Toluene	"	3,000
48	Arizol	"	3,000
49	Liquid chlorine	"	2,000
50	Chemicals for plant protection	000 $	100
51	Products of the petroleum industry	"	1,000
52	Propane-butane gas	000 tons	20
53	Tires and rubber products	000 $	100
54	Miscellaneous chemical products	"	3,000
55	Kraft and other paper pulp	"	800
56	Miscellaneous paper and cardboard	"	1,000
57	Wood chipboard	"	2,000
58	Charcoal	Tons	1,000
59	Cement	000 tons	50

List A/1979 (continued)

1	2	3	4
60	Raw and processed foods	000 $	3,000
61	Seed and nursery stock	"	500
62	Pharmaceutical raw materials and cosmetic products	"	3,000
63	Essential oils and plants	"	400
64	Textiles, textile raw materials, garments, textile accessories and trimming	"	4,000
65	Raw hides and leather products	"	3,000
66	Synthetic fibers and yarn	"	500
67	Consumer goods	"	3,000
68	Border trade	"	5,000
69	Carriage	"	4,000
70	Tourism	"	2,600

List B/1979. Exports From the Socialist Federal Republic of Yugoslavia to the People's Republic of Bulgaria

No	Commodity Designation	Unit of Measurement	Quantity or Value
1	2	3	4
1	Equipment and spare parts for shipbuilding	000 $	1,200
2	Ship repairs	"	4,000
3	Railroad cars	Units	150
4	Forgings	000 $	500
5	Nickel-cadmium storage batteries	"	700
6	Drive chains	"	200
7	Diesel engines	"	1,000
8	Spare parts for diesel engines	"	800
9	Construction machines, medical equipment and equipment for the chemical industry, steel fittings and other machines and equipment	"	10,000
10	Welding machines	"	300
11	Railroad trestles	"	4,000
12	Tanks for beer	Units	8
13	Spare parts for railroad cars	000 $	500
14	Agricultural machines and spare parts	"	1,500
15	Metal- and woodworking machines	"	700
16	Other machines, equipment and mutual deliveries under cooperative arrangements	"	4,000
17	Bearings	"	150
18	Cooperation in production of washing machines	"	500

List B/1979 (continued)

1	2	3	4
19	Products of the electronics and electrical equipment industries	000 $	3,000
20	Sieves for the paper industry and other industries	"	300
21	Refractories	"	200
22	Cables and conductors	"	3,000
23	Abrasive material and corundum	"	1,000
24	Tools	"	100
25	Processing of nonferrous metals and semi-finished products	"	1,000
26	Castings of gray iron	Tons	1,500
27	Exchange of products of ferrous metallurgy	000 $	8,000
28	High-grade steel	Tons	8,000
29	Seamless pipe	"	8,000
30	Steel gas cylinders	Units	5,000
31	Aluminum, aluminum shapes and aluminum manufactures	000 $	8,000
32	Aluminum foils	Tons	500
33	Antimony	"	1,000
34	Metallic silicon	"	700
35	Products of nonferrous metallurgy	000 $	1,200
36	Metal products	"	1,000
37	Nitrocellulose	Tons	400
38	PVC pellets	"	400
39	Polyvinyl acetate	"	2,000
40	Dodecyl benzene	"	5,000
41	Titanium dioxide	"	500
42	Xanthates	"	500
43	Chromium-potassium sulfate	"	500
44	Gelatin	"	50
45	Monochloroacetic acid	"	300
46	Lindane	"	50
47	Polyols	"	500
48	Sodium chlorate	"	400
49	Polyurethane	"	100
50	Chemicals for plant protection	000 $	1,000
51	Auxiliary supplies for leathermaking and textiles	"	700
52	Paints, varnishes and raw materials	"	1,000
53	Tires and rubber products	"	1,000
54	Conveyor belts and other rubber products	"	500
55	Equipment for workplace safety	"	100
56	Products of the petroleum industry	"	1,000
57	Miscellaneous chemical products	"	3,000
58	Cellophane	Tons	500

List B/1979 (continued)

1	2	3	4
59	Cellophane tape	Tons	50
60	Miscellaneous paper and cardboard	000 $	2,200
61	Textiles, garments, textile accessories and trimming	"	4,000
62	Viscose silk	Tons	600
63	Wool-type cellulose fiber	"	1,000
64	Viscose cord	"	200
65	Synthetic fibers and yarn	000 $	500
66	Pharmaceutical raw materials, cosmetic products and lacquers, etc.	"	2,000
67	Seed and nursery stock	"	500
68	Consumer goods	"	3,000
69	Housewares	"	500
70	Raw and processed foods	"	3,500
71	Border trade	"	5,000
72	Goods based on installments of the highway loan which have come due	"	850
73	Miscellaneous goods	"	2,000
74	Carriage	"	14,000
75	Tourism	"	2,600

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YUGOSLAV-POLISH COMMODITY TRADE LISTS FOR 1979

Belgrade MEDJUNARODNI UGOVORI (supplement to SLUZBENI LIST SFRJ) in Serbo-Croatian No 8, 17 Jul 80 pp 322-326

[Commodity lists from trade protocol ratified 31 May 1979 in Belgrade by the Federal Executive Council and signed by FEC chairman Veselin Djuranovic]

[Text] List A/1979. Exports From the Socialist Federal Republic of Yugoslavia to the People's Republic of Poland in 1979

No 1	Item Designation 2	Unit of Measurement 3	Quantity 4	Value, 000 $ 5
1	Deliveries based on cooperation and specialization			85,900
	Breakdown:			
	Motor vehicle industry			40,500
	Ignition devices in the motor industry			500
	Automotive electrical equipment			1,000
	Industry of tractors and farm machines			25,000
	Including spare parts alone	$2 million		
	Rail vehicle industry			300
	Electronics industry			6,000
	Electrical equipment industry			2,000
	Machine tool industry			6,400
	Including woodworking machines	$400,000		
	Construction and roadbuilding machine industry			2,000
	Industry of household appliances and municipal service equipment			1,300
	Household plumbing fittings			300

List A/1979 (continued)

1	2	3	4	5
	Medical instruments			600
2	Equipment for the fuel and power industry and the processing industry			11,000
	Breakdown:			
	Equipment for the fuel and power industry	$9 million		
	Equipment for the processing industry	$2 million		
3	Miscellaneous machines and equipment			9,000
	Including:			
	Equipment for the food manufacturing industry			
4	Buses	Units	600	
5	Construction machines and parts			10,000
6	Machines for the textile, leather and footwear industries			1,800
7	IMR-33 motors	"	500	
8	Equipment for garages and service stations			350
9	Truck assemblies			600
10	Parts for the Zastava 750 car			1,000
11	Parts for buses			6,100
12	Mining equipment and parts			5,000
13	Products of the electrical equipment industry			5,000
	Including:			
	Transformers			
14	Tools			2,500
15	Industrial fittings			300
16	Medical instruments and equipment			1,000
17	Office machines			500
18	Ball bearings			1,100
19	Metal products			2,000
20	Electrical porcelain			2,500
21	Abrasives			1,600
22	Castings			3,500
23	Semifinished aluminum products	Tons	5,000	
24	Products of the cable industry			3,000
25	Exchange of products of the cable industry			2,000
26	Copper foils	"	190	190
27	Bauxite	"	p.m.*	
28	Alumina	"	75,000	

List A/1979 (continued)

1	2		3	4	5
29	Metallic silicon		Tons	1,000	
30	Ferromanganese		"	4,000	
31	Ferrochromium		"	2,500	
32	Ferrosilicon		"	5,000	
33	Ferrosilicomanganese		"	2,500	
34	Exchange between steel mills				25,000
35	Exchange of other products between steel mills				3,500
36	Products of ferrous metallurgy obtained from the processing of ingots		"	100,000	
37	Burned magnesite		"	18,000	
38	Refractory brick		"	14,500	
	Acid-resistant and fireclay	8,000	"		
	Silicate	4,000	"		
	Magnesite	2,500	"		
39	Miscellaneous nonmetallic minerals		"		p.m.*
40	Bentonite		"	20,000	
	Including:				
	For drilling and casting				
41	Asbestos products				800
42	Laboratory and technical glass				300
43	Paper, paperboard and finished paper products				2,500
44	Sorghum straw				400
45	Beech lumber		Cubic meters	10,000	
46	Ash lumber		"	1,500	
47	Veneer		000 m^2		
48	Pharmaceutical products				6,000
49	Products of the rubber industry				4,200
50	Chemicals for plant protection				3,000
51	Tribasic sodium phosphate		Tons	1,500	
52	Aluminum hydroxide		"	25,000	
53	PVC pellets		"	4,000	
54	Polyvinyl acetate		"	2,000	
55	Phthalic anhydride		"	1,000	
56	Dibasic calcium phosphate		"	5,000	
57	Petroleum coke		"	2,000	
58	Miscellaneous chemicals				4,400
59	Exchange of fibers and yarn for the textile industry				5,000
60	Alcoholic beverages				2,000
61	Tobacco		"	400	
62	Pork				p.m.*

List A/1979 (continued)

1	2	3	4	5
63	Corn	Tons		
64	Seed corn	"	9,000	
65	Miscellaneous raw and processed foods			15,000
66	Knitwear and other textile products			10,000
67	Exchange of an assortment of products of the leather industry			300
68	Housewares			1,000
69	Cooperation in the production of housewares			500
70	Miscellaneous glass products			1,500
71	Industrial consumer goods			22,000
72	Films, books and philatelic articles			100
73	Exchange of goods between organizations for domestic trade and cooperative organizations			4,500
	Including:			
	Exchange between cooperative organizations	$3 million		
74	Miscellaneous			3,000
75	Tourist services			6,000
76	Construction services			8,000

* (?) Depending on availability--translator's note.

List B/1979. Exports From the People's Republic of Poland to the Socialist Federal Republic of Yugoslavia in 1979

No	Item Designation	Unit of Measurement	Quantity	Value, 000 $
1	2	3	4	5
1	Delivery on the basis of cooperation and specialization			85,900
	Breakdown:			
	Motor vehicle industry			40,500
	Ignition devices in the motor industry			500
	Automotive electrical equipment			1,000
	Tractor and agricultural machine industry			25,000
	Including spare parts	$2 million		
	Rail vehicle industry			300

List 6/1979 (continued)

1	2	3	4	5
	Electronics industry			6,000
	Electrical equipment industry			2,000
	Machine tool industry			6,400
	Including woodworking machines	$400,000		
	Construction and roadbuilding machine industry			2,000
	Industry of household appliances and municipal service equipment			1,300
	Household plumbing fittings			300
	Medical instruments			600
2	Complete facilities			
	Breakdown:			
	Fuel and power facilities	$21.3 million		
	Equipment for sugar mills	$11.8 million		
	Other equipment	$ 8.0 million		
3	Conveyor belts and mining equipment			10,000
4	Construction machines and parts			15,000
5	Textile machines and parts			3,000
6	Tools			2,000
7	Miscellaneous machines and equipment			3,000
	Including:			
	Machines for the food manufacturing industry			
8	Trucks	Units	150	
9	Ball bearings and parts			4,500
10	Products of the electrical equipment industry			2,500
	Including:			
	Transformers			
11	Office machines			500
12	Parts for buses			2,000
13	Equipment for garages and service stations			350
14	Medical instruments			500
15	Metal products			2,000
16	Abrasives			600
17	Rolled products	Tons	65,000	
18	Exchange of products of ferrous metallurgy			25,000
19	Exchange of other products between steel mills			3,500

List B/1979 (continued)

1	2	3	4	5
20	Semifinished products of ferrous metallurgy (processing of ingots)	Tons	150,000	
21	Exchange of products of the cable industry			2,000
22	Coking coal	Tons	p.m.*	
23	Charcoal	"	80,000	
24	Coke fines	"	25,000	
25	Electrodes			500
26	Sulfur	"	65,000	
27	Synthetic rubber	"	1,200	
28	Pharmaceutical raw materials and products			4,000
29	Products of the rubber industry			2,800
30	Dyes and pigments			4,000
31	Dibasic ammonium phosphate	"	p.m.*	
32	Lye	"	15,000	
33	Ammonium sulfate	"	p.m.*	
34	Polypropylene	"	10,000	
35	Carbon disulfide	"	12,000	
36	Terephthalic acid	"	1,000	
37	Nitric acid	"	10,000	
38	Chemicals for plant protection			1,000
39	Miscellaneous chemicals			10,000
40	Cement	"	p.m.*	
41	Raw refractory materials Including: Roasted corundum, fused mulite, and high-alumina cement			1,000
42	Miscellaneous nonmetallic minerals			p.m.*
43	Pulpwood, softwood	Cubic meters (stacked)	100,000	
44	Scrap paper	Tons	10,000	
45	Miscellaneous products of the paper industry			1,000
46	Miscellaneous products of the wood industry Including: softwood lumber, telephone and telegraph poles	$3.5 million		3,500
47	Exchange of fibers and yarn for the textile industry			5,000
48	Vodka			1,000
49	Miscellaneous raw and processed foods			6,000

List B/1979 (continued)

1	2	3	4	5
50	Products of the textile industry (fabrics, knitwear and accessories)			10,000
51	Exchange of assortment in the leather industry			300
52	Housewares			p.m.*
53	Cooperation in the housewares industry			500
54	Miscellaneous glass and crystal products			1,500
55	Porcelain, porcelite and ceramics			2,000
56	Industrial consumer goods			13,000
57	Films, books and philatelic articles			100
58	Exchange of goods between organizations for domestic trade and cooperative organizations			4,500
	Including: Exchange between cooperative organizations	$3 million		
59	Miscellaneous			3,000
60	Tourist services			1,500

* (?) Depending on availability--translator's note.

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ENERGY PROBLEMS, CONSUMPTION EVALUATED

Structural Changes in Primary Energy Sources

Prague PLANOVANE HOSPODARSTVI in Czech No 7, 1980 pp 1-6

[Article by Vitezslav Vinklarek, deputy chairman of the State Planning Commission]

[Text] The development of the Czechoslovak economy in the postwar period made possible truly revolutionary changes in the life of our society. From the time when the problem was to make sure that people had enough to eat and adequate clothing and shoes, a situation has emerged in which the vast majority of the population, rather than only a few privileged individuals, is selectively choosing from among better types of food, clothing and footwear. Today even young families consider a high living standard and the best of everything for children, as quite normal. Whole cottage communities have sprouted in the countryside, we are establishing second residences for our leisure time, and we travel abroad in large numbers during summer vacations. We have developed and maintained a high European living standard which, unlike those in the capitalist countries, has its socialist certainties.

The global situation, however, has also undergone changes. The most significant of these with respect to the CSSR economy are the changes on the world markets of fuels, energy, raw materials and foodstuffs. Their procurement is much more difficult, both physically and in economic terms. In the Czechoslovak economy, with its own insufficient and limited raw material base, this causes severe problems. The main consequence of the 1973-74 changes, and their escalation in 1978-79 and thereafter, lies in the fact that the demands of fuels, raw and other materials on the national income are growing. In the long run this acts the same as if the national income's very formation were slowing down.

The changes at home and throughout the world levy new demands on our economy and the resources developed within it. It goes without saying that the nature of these demands is not so much quantitative as primarily qualitative. In production, and gradually also in consumption management, we

must find a way to focus attention on problems of quality. We need to reach a point where, through better quality and more intensive use of labor, fuels, energy, raw and other materials in production, we turn out products of ever-rising technological and qualitative level, and where these products become more profitable especially in foreign markets, but also in domestic markets.

Among the areas which most influence the effectiveness of the formation and allocation of national revenue in the present period of development is the fuels and energy complex. Physical facts might create the impression that everything is in good order, that here we have a process which reflects the growth of efficiency, and that the only thing to be concerned about is its pace, i.e., possible acceleration.

For each billion korunas of national revenue we use up the following quantities of primary energy sources (in thousands of tmp [tons of standard fuel]):

	1970	1975	1980 (est)
	259	225	210
drop	--	34	15

The lowering of energy demands on national revenue formation is thus clear. What is also visible, however, is its slowdown. This is obviously linked to higher use of solid fuels which occurred following the sharp rise in the price of oil in 1973-74 (and transformation of energy and its refining is less effective when based on solid fuels). There is no doubt that this process is also influenced by a slower growth in the national income which occurred in recent years.

The question of lower pace in energy demand assumes a different dimension when we examine how much it costs to procure a given quantity of primary energy sources. Without great analysis and evidence, I can state that 210,000 tmp in 1980 is considerably more expensive than 225,000 in 1975, and 259,000 in 1970. Stated simply, the cost of primary sources needed to form a unit of national income, is growing. In other words, it is a fact that either the pace of lowering energy demand slowed down too much, or the energy structure has become too costly. It seems that both aspects have become the order of the day.

Let us first examine what types of fuels (judged by the cost of their production) are increasing their significance in the overall structure of primary energy sources for domestic use. In this, let us consider that

--while domestic sources are acquired under steadily worsening conditions, their cost nevertheless rises relatively slowly (this, of course, does not mean that we are indifferent to this rise and that funds for this purpose can be approved lightly),

--imported sources consist largely of oil and natural gas. Their cost has risen enormously in two waves, first in 1973-74, and second in 1978-79, and continues to rise.

Supplying the growing domestic consumption needs, under above-mentioned circumstances, is developing as follows (in millions of tmp):

	1970	%	1975	%	1980(est)	%
Domestic sources	58.4	71.9	58.7	63.0	61.5	57.9
Sources from import	22.8	28.1	34.5	37.0	44.7	42.1
Domestic use overall	81.2	100.0	93.2	100.0	106.2	100.0

Constantly rising in the past decade is the percentage of imports to meet domestic consumption needs of primary energy. Even without documentation, I must say that this picture, i.e., growth of imported fuels, is also clearly visible in securing the production of electricity and heat. The cost growth per unit of primary sources needed per unit of national revenue results, in the first place, from the percentage growth of expensive imported fuels, especially oil, in the overall domestic consumption of primary energy sources.

Thus arose a whole new situation. Ten or 15 years ago, we promoted the line in the national economy of using oil and its byproducts to the maximum extent possible for the needs of the energy industry, switching from electrification of long-distance and urban transport to diesel power, and utilization of primarily motor and heating oil as a factor in labor productivity growth in mining and the other industries, as well as in construction and agriculture. For example, for long years we were satisfied with virtual stagnation in the extraction of energized brown coal--for all practical purposes, until 1975. All that was correct then, in a period of cheap (and getting cheaper) oil and low-cost raw materials. However, to continue this policy even now, especially with the argumentation "why, for 10 years you were pushing us into it," would be an anachronism, to say the least. Failure to understand that to operate, in a period of expensive oil and raw materials, the same way we did when they were inexpensive, would represent a heavy loss to the national economy.

Naturally, the new situation does not mean immediate abolition of all past practices and introduction of new ones. The national economy does not tolerate abrupt measures which have "catastrophic" consequences. Moreover, we have been reacting to the new conditions to some extent ever since 1974. We slowed down the growth of oil-related product consumption for energy purposes, and even in motorization, etc. The new situation, however, requires more consistency and continuation in the adopted course in a more programmatic and thoughtful manner in all respects. The price rise which we are currently experiencing again on all world markets, is beginning to affect our economy to the full extent--the grace period we were granted, and still are, by virtue of the system of price formation with respect to

the Soviet Union and the other socialist countries, is beginning to be exhausted. What, then, is the situation; what are the conditions and remedies; and what may, or must, be the approach to resolution? If in the immediate future we can still count on a modest rise in oil processing, in a more long-term view it will be wise to expect a certain decrease. Simultaneously, oil consumption for chemical purposes will apparently continue to grow. The same will be true in mechanization, even though such consumption is subject to all-embracing effectiveness and economy standards. The production capability of light particles in oil must be raised by the cracking process. This is one side of the problem which, however, is linked with the lower projection of the dark particles, thus with lower oil utilization for energy purposes. In our circumstances, this lower oil utilization cannot be replaced by anything but energized coal and nuclear electricity. That is the other side of our problem. Consequently, more intensive oil processing, more extraction of brown coal especially, and more nuclear electric power, constitute the Gordian knot, the cutting of which, as relates to this branch, will determine the future growth of effectiveness of our national economy, as a gradual resolution of a number of problems in the fuels and energy balance in our country.

This means that we are on the threshold of important changes in the structural makeup of the national economy. These changes must seek to ease the burden on national income formation placed on it by the situation in fuels and energy. As the following will demonstrate, this involves a whole series of changes.

What problems and tasks must we focus on? What needs to be done?

1. Remove gasoline as rapidly as possible from use in the energy industry. As surprising as it may seem, we are using 100,000 tons of it for these very purposes. Even today, it is the most expensive fuel and there is no doubt that when it is manufactured by the cracking process, it will be even more expensive. Most likely, the best substitute must be natural gas.

The use of gasoline as fuel must, for all intents and purposes, be limited to private motor transport and even there technological progress must assist in reducing standard consumption. Efficiency in the use of gasoline in this one area is achieveable. That particular use of gasoline aside, it must be considered a form of petrochemical raw material the relative value of which will be reassessed in future phases of the reproduction process. In this regard, we should note that the replacement of certain products made from domestic raw materials (glass, ceramics) by plastics, is currently not always desirable. On the contrary, by doing this there is considerable wasting of plastics.

2. More effective and economical handling of motor and heating oil throughout the national economy, since it is the second most expensive fuel. This is especially important in

--transportation, where (in addition to elementary discipline, such as full utilization of each trip) we face two basic problems: The range of transport operations as such, and the type of fuel power base. The range of transport operations is tied to the overall national economic tendencies, the pace of development, the extent of fuels, metals, and raw materials consumption, their relative values, etc. Intensification in national economic development therefore represents the principal criterion in determining the scope of transport operations, as well as in lowering oil consumption. In this connection we are about to strengthen the role of rail transport in the overall transportation structure, in both freight and passenger operations. The fuel power base which has in the past relied on higher use of diesel oil, will henceforth have to be reoriented toward electricity. Motor oil for long-distance, but also urban, transport, will have to be replaced by nuclear electricity. This constitutes a major structural change, the implementation of which will result in electrification of railroads, as well as urban mass transit, and in production restructuring of locomotives, buses, and streetcars. This must be synchronized in time with the construction of nuclear electric plants and the increase in electricity production therein;

--in the construction industry we must avoid projects which require great movement of materials and thus high consumption of motor oil. This is, of course, linked with the concepts of capital investment and its orientation in greater measure not on large construction projects with extensive ground operations, but rather on such structures as can be built with less movement of materials than was the case before. The use of motor oil in this area for heating will not be possible in the future.

--in agriculture today we can no longer manage without extensive mechanization and ensuing consumption of motor oil. We must, however, avoid its use for other than these technological purposes. We should note that there is high consumption of motor oil as a source of heat, for hot water, for the production of pressed fodder, etc. In each individual case, we must calculate whether, given the foreign (not domestic) price of motor oil, its use is still profitable (e.g., production of pressed fodder, considering the quality of other types of fodder).

Generally, we must say with respect to motor oil consumption that its domestic price does not reflect its relationship to other types of fuels, that it distorts the view of its effective utilization, and invites a tendency to ignore conservation in its use.

3. As soon as possible we must halt the rise in light and heavy heating oil consumption for electricity and heat production, and soon thereafter begin to limit their use throughout the industry. Production of electricity and heat by means of fuels whose price is several times higher than the price of domestic fuels, is obviously counterproductive.

This is one of the complicated ways of resolving the problem. Part of the answer (as in changes in the power source in transportation) doubtless

lies in the construction of nuclear plants and their production of electricity. After all, in the growth structure of primary energy sources entering the national economy, the growth of nuclear-produced electricity will be of ever increasing importance. While in 1971-75 oil alone represented almost two thirds of the overall increase in domestic use of primary energy, in 1976-80 it still represented about one third. However, in the coming 5 years its increase will represent roughly only one tenth of the overall consumption of primary sources. In contrast, nuclear energy which in this five-year plan is about one tenth, will in the next 5 years represent almost half of the overall increase in primary energy consumption. It is because of this that corresponding transformation (direct and indirect) of this increase in usage must be found.

What then is of primary importance?

--reduce production of electricity in all plants which depend on heating oil, to gradually correspond to the growth in nuclear energy production, that is, transformation, the implementation of which is relatively easy. As a result of this change, we must achieve an absolute lowering of heating oil use.

--however, to turn a portion of the increase in primary sources gained by nuclear process into heat is a more difficult transformation with respect to both structure and location (excepting a relatively small portion intended to supply heat in the vicinity of nuclear power plants). Several alternatives are possible, the individual advantages of which must be tested, but each of them can prove useful to some degree.

a) the simplest way would be to use electricity from nuclear plants for direct heating of, for example, family houses or installations of the tertiary sphere. This would be best with respect to the environment, and acceptable in terms of energy distribution. The converse of this could be using the increased production of electricity from nuclear plants to further lower production in traditional coal plants, thus reducing the consumption of coal. Low-quality brown coal made available in this way can be used in heating plants and, assuming that the engineering industry produces even smaller boiler units for effective use, we can gain heat for even smaller living and other areas.

b) somewhat harder and governed by location is the possibility of transition of condenser electric plants to thermal operations. This can be advantageous where a major overhaul has already been deemed necessary, where there is potentially large consumption in industry and communal housing, and where the distribution is linked to installation where obsolete heating oil equipment can be replaced.

Generally speaking, it will apparently be necessary to envisage that it will not be possible everywhere to renew obsolete heating and adapter equipment using heating oil. Given the fact that import of expensive oil will decrease in the future, it will be necessary to use the cracking

process; consequently, there will be a drop in heating oil sources and much of the existing equipment will have to be reconstructed. Possible replacements can be provided by some of the above-mentioned methods; in exceptional cases it may be possible to use natural gas.

The cost of primary energy sources needed to form a unit of national income must be purposefully regulated. Their tendency to rise will continue in domestic, but especially in foreign imported sources. Limiting this tendency in brown and black coal, and effectively managing fuels in nuclear plants, must be one of the most important goals of the overall fuels and energy policy. But most of all, we must limit consumption of the most expensive primary energy sources, namely oil and oil-related products, in the transformation of the energy complex. Burdening national revenue with these expensive sources is the same as not having any formation of national income at all. And this is the more serious the slower the formation of national income becomes.

Given the high price of fuels, energy, and raw materials, the primary concern throughout our national economy must be in their conservation and maximum effectiveness in utilization. This is even more important when we consider the fuels and energy situation in the whole country. It is for this reason that we are preparing a special, targeted state program for fuels and energy conservation. The main thrust of this program must be directed at the largest possible savings in oil and oil-related production. Moreover, we will have to learn to utilize more efficiently that portion of primary sources which will then enter the reproduction process. All products, be it foodstuffs, textile, glass, footwear, engineering, construction, or metallurgy, every one of them contains primary energy which costs us dearly in labor and funds. To some extent, we can even claim that virtually the same amount of energy is expended on a bad product as on a good one, on a technically obsolete one or one which is modern in every respect. The point is, however, that the good, technically flawless product can be profitably sold on the domestic or foreign market, which balances the cost of the primary energy which helped to produce it.

It must be the concern of the national economy as a whole and of all levels of management to economize in fuels and energy, to utilize them effectively in the course of the production cycle. Only then will the country have a sufficient supply of fuels and energy to make sure that we produce excellent, high-quality merchandise. Only in this manner can we cut the Gordian knot of primary energy sources, and overcome its limiting force.

Rationalizing Consumption

Prague PLANOVANE HOSPODARSTVI in Czech No 7, 1980 pp 7-10

[Article by Karel Houdek, State Planning Commission]

[Text] In the Directive for Economic and Social Development in the CSSR during 1976-80, the 15th CPCZ Congress decreed more effective management

and valuation of all types of fuels and energy, raw and other materials, and the reaching in industry of 2 to 2.5 percent annual savings in fuels and energy. To accomplish this task the CSSR Government adopted resolution No 123 of 13 May 1976, according to which respective ministers ensure, in the specifications of the state plan, implementation of rationalization measures, and thus guarantee, within the ceilings of the industrial branches, savings of 10.4 million tons of standard fuel [tmp].

These savings are being achieved. It is anticipated that their volume in industrial branches will be more than 10 percent higher. Moreover, since 1978, the kraj national committees have been tasked in this direction and savings there are expected to reach 380,000 tmp. In addition, the state program of rationalization of energy and fuels consumption, established long-term concepts of lowering energy demands in the Czechoslovak economy by setting up regional mechanisms, especially in the manufacture of energy-consuming products. These measures deal primarily with accelerating the introduction of semiconductor technology in high- and low-tension electric operations, better utilization of secondary energy sources, modernization of energy-consuming equipment, rationalization of electricity consumption in lighting technology, regulation and reduction in the use of heat and utility hot water in apartment and communal housing, and reduction in heat losses caused by faulty insulation of buildings.

Despite certain progress in lowering energy demand in our national economy, we cannot be satisfied with the results achieved. Completion of the process of replacing mercury regulators by those made of silica is suffering from delays, we have not fully met the needs of semiconductor welders, nor have we ensured to the needed extent the production and application of high-tension semiconductor technology in the regulation of industrial motors, and we have delayed delivery of thyristor regulators for both industrial motors and transportation. Manufacture of measuring and regulating instruments for heating systems intended for complex housing construction operations, does not fully meet the need.

The above-mentioned facts are partially reflected even in the structure of the fulfillment of the rationalization measures plan. They do not, however, fully explain certain negative trends which, in achieving savings in fuels and energy, are clearly evident, especially the high percentage of small rationalization measures, growth in the share of operations where savings in fuels and energy are merely an accompanying feature, and the relatively low percentage of important operations which are achieving measurable saving in fuels and energy. This, together with the fact that, for the purpose of saving over 500 tmp, or 1,000 MWh, the branches are spending 0.5 to 1 percent of their overall investments, would indicate insufficient appreciation of consumption rationalization in fuels and energy in the investment and economic policies of the industrial branches.

The future outlook for the Czechoslovak fuels and energy inventory, which relies on its own geological reserves of fuels, a realistic forecast for

nuclear energy development, and import of fuels and energy sources, indicates the need for fundamental changes in branch approaches to resolving the problems of fuels and energy conservation. Without substantial intensification of the rationalization process aimed at maximum economic performance with minimized fuels and energy consumption, the fuels and energy inventory will become a limiting factor in national economic development. Acceleration of the conservation process in energy demand must be initiated even now, in 1980, and fully implemented during the Seventh and Eighth Five-Year Plans. This task should be understood as part of complex economic relationships and must be implemented in all branches of the national economy.

An important prerequisite for the accelerated pace of lowering energy requirements in the Czechoslovak economy, is better utilization of fixed production assets. Their low utilization is one of the causes of insufficient economic performance. Yet, buildup of fixed assets, the cost of which rises along with their lower utilization, itself ties up considerable capital investment and consumes energy sources. Due to ceilings in capital investment and construction assets, it is impossible to maintain production potential at the most advanced world level, which further reduces economic performance and, at the same time, raises energy demand per production unit.

Among important conditions on which success depends in a dynamic development of supplying the Czechoslovak economy with fuels and energy, we must include:

--modernization of aging energy-consuming equipment which will decrease standard fuels and energy consumption for corresponding production;

--maximum utilization of secondary energy sources which, given the shortages in the primary sphere, represent a potential reserve in the Czechoslovak fuels and energy inventory (construction of incinerators, etc.);

--lowering material demand of the Czechoslovak economy, especially machinery, outfitting, and construction;

--substantially increasing the technical level of a number of our products so that their technological and economic parameters become comparable with products of the most advanced countries. This, in the process of international exchange, will bring about their better reassessment and, at the same time, in most cases also reflect their lower operation consumption of energy in their production.

An example of this type is the following survey of excavator production where the new model KU 800 offers only slightly better performance than the K 800, yet the new model has substantially higher operational weight and is almost six times as expensive:

Excavator designation	Theoretical performance m^3/hr	Theoretical performance per 1,000 m^3/yr	Actual performance per 1,000 m^3 from	Actual performance per 1,000 m^3 to	Op. weight tons	Price mil korunas
K 25	160	1,380	800	1,200	110	0.8
K 302	280	2,400	1,000	1,250	110	1.0
K 300	480	4,150	1,500	2,000	600	7.9
RK 400	480	4,150	2,000	3,300	800	21.5
K 800	1,200	10,300	3,500	6,000	1,315	19..
KU 300	800	6,900	2,000	2,600	1,050	25.0
KU 800	3,000	25,850	6,000	7,800	3,800	115.0

Resolution of the problems of maximum effectiveness in the use of energy has, due to the more difficult conditions in securing fuels and energy, become a global concern. It is even part of the targeted long-range programs of economic cooperation of the CEMA member states, which deal primarily with problems of lowering fuels and energy consumption, development and perfection of new technological processes, decreasing energy losses in all branches, and maximum utilization of the expensive energy sources.

An important step toward implementation of accelerated decrease in the energy demands in Czechoslovak economy during the Seventh and Eighth Five-Year Plans is the elaboration of the long-term programs of consumption rationalization, savings, and utilization of all types of fuels and energy, as part of the targeted state program. The applicable CSSR Government Presidium resolution No 240/1979 directs, among other issues, the following in this matter:

--achieve lowering of energy demand in Czechoslovak economy through the implementation of concrete measures which will allow savings in 1985 of at least 11 million tmp, and in 1990 at least 25 million tons,

--in the development of iron metallurgy, eliminate increases after 1980 in the overall volume of technological consumption in fuels and energy,

--manage fuels and energy consumption in the nonproduction sphere at roughly the same pace as that of the overall domestic consumption of primary energy sources. At the same time, utilize to the maximum local energy sources, especially combustible waste, regulate the pace of development in the use of private cars in consonance with the development of available sources, and guarantee, with lower fuel consumption, necessary facilities in rail transport and, without increasing consumption, in road transport.

The cited government resolution also approved the intent of the targeted state program of consumption rationalization and utilization of fuels and energy, which embraces concrete tasks in securing a trend toward more effective lowering of energy demands in all branches of the national economy.

in the area of improvement, transformation, and in transporting fuels and energy, we are getting ready for the utilization of selected condenser, traditional, as well as nuclear electric plants to supply industry and the population with heat. High savings can be achieved by modernizing the boiler inventory. Through innovation in the branch and distribution networks we will, in addition to cutting losses, also achieve higher reliability in transit and deliveries. Overall, through the implementation of concrete measures in this sphere, we expect to save in 1985 1.5 million tmp/yr, as compared with 1980.

In the metallurgy of iron and nonferrous metals, we can save in 1985 at least 1.9 million tmp/yr. This, however, depends primarily on changes in the technology of steel production, introducing automated systems in blast furnace operations without a cupola, and better utilization of costly energy sources.

In engineering we can save in 1985 600,000 tmp/yr, especially by implementing a program of reconstruction and modernization of the engineering base and measures in the production of casts. The engineering branch has an important role in the Czechoslovak national economy with respect to lowering its energy demand, because it defines in large measure level of value added of metal composition and quality, as well as the energy parameters of engineering equipment used in all the branches. By means of this, it strongly affects both the suitability of our machinery in the international exchange, and the level of energy losses in Czechoslovak economy. Based on preliminary findings, we can count on relative saving of 1.2 million tons of ferrous metal which, computed in fuels, represents about 1.5 million tmp during the period of the Seventh Five-Year Plan.

In the chemical and consumer goods industries, it is possible by introducing new technology and utilizing secondary sources, to achieve in 1985 a saving of at least 1.2 million tmp/yr. In the production of building materials we can, through the introduction of new, modern technology, save 360,000 tmp annually. Considerably higher savings can be achieved by higher production of perfected heat insulation, fiber, and heat-resistant materials and their application in other branches of the national economy. Their volume in 1985 is to reach 1.8 tmp/yr, compared with 1980.

In agriculture and food industry we expect to save in 1985 about 260,000 tmp, primarily through optimum resolution of problems in agricultural transportation, innovation in pressed fodder production, and higher utilization of secondary energy sources.

Economy in all fuels and energy consumption and the program of their relatively higher valuation, is becoming one of the basic prerequisites of successful future development of our national economy and higher living standard of the population.

Consumption of Oil Products Viewed

Prague PLANOVANE HOSPODARSTVI in Czech No 7, 1980 pp 11-17

[Article by Eliska Kohlova, State Planning Commission]

[Text] After World War II, there was a marked increase in Europe in oil consumption resulting from a sharp growth in private automobile travel, air passenger and freight transport and, in the economically advanced countries, the use of oil products in chemical processing. The share of raw materials based on oil for a new branch of the chemical industry--petrochemicals--increased sharply, especially since the early 1960's. Gradually, oil began to replace certain types of traditional sources of fuels because, in comparison with coal especially, it was economically profitable. The result of this trend was that global consumption of oil in the early 1970's reached 3 billion tons per year. As illustration, we can state that in 1971 the share of oil in primary energy sources in the European Economic Community [EEC] was about 63 percent; in Japan, 75 percent; and in the United States, 45 percent (in the United States energy needs are met to a large extent by natural gas). The rapid rise in consumption in the initial economic growth of the developing countries could not be satisfied by traditional sources. It became necessary, therefore, to explore oil reserves which are very demanding in terms of capital investment (North Sea, Alaska, Siberia).

The World Oil Market

Given the trend in oil consumption in the early 1970's, it was estimated that in 1990-2000 the global production of oil would reach about 5.5 to 6 billion tons. This amount was considered the technical and economic maximum achievable and would mean that, after easily accessible sources had been exhausted, there would be a conflict between demand and supply with all the consequences for world economy.

The price of oil until 1973 was, in comparison with other primary energy sources, very advantageous, way below its exploitable properties. In the period when the rate of inflation in capitalist economies rose dramatically, the low price of oil became one of the barriers in the development of the producer countries. The first price increase by the OPEC countries was influenced by the cost of U.S. production and the production cost of the new drilling operations in the North Sea and Alaska. Even though the rise in oil prices was influenced by economic development, its principal impulse is to be found in the political events in the Middle East where roughly two thirds of the global oil supply are produced. Production and marketing of oil in 1973-79 were seriously affected by these events and prompted the producers to institute further price increases.

The advanced capitalist countries which import a large percentage of the oil they need from the Middle East, were unable, due to economic and

technological considerations, to replace it by other raw materials. Acceptable replacements for gasoline, motor oil, asphalt, and raw materials for chemical processing, have not been found.

As already stated, the concrete level of imports after 1973 was influenced by many factors. It was therefore necessary to reduce the inordinate rise in consumption and orient the economy toward other energy sources.

The reaction of the advanced capitalist countries to the changes in the oil market is illustrated in the following table (in millions of tons):

Consumption of Oil Products in Economically Advanced Countries

	1973	1978	% of own oil in 1978
United States	827.7	887.9	54.9
Japan	271.5	262.6	0.2
FRG	151.9	142.7	3.6
France	127.7	119.0	0.9
England	114.4	94.0	56.8
Italy	106.2	99.5	1.5

Where consumption of oil products had not decreased, as shown by the example of the United States, complications arose, the final resolution of which will inevitably lead to a significant reduction in consumption.

Development of Oil Consumption in the CSSR

Oil consumption, which immediately following World War II was practically zero, has since then registered roughly the same upward trend as in other economically-developed countries. In 1970 production based on oil was 10 million tons; in 1975, about 16 million tons; and in 1980 we expect it to be about 19 million tons. The volume growth of oil products in the CSSR made possible development in private automobile travel, public freight and passenger transportation, mechanization of strenuous labor in agriculture and forestry, and use of diesel oil in rail, river, and air transport.

Since, compared to our need, our domestic sources of oil are negligible, we must meet this need by imports almost exclusively from the Soviet Union. In 1978, for example, the Soviet Union provided 97.8 percent of Czechoslovakia's requirements in oil, and this under very advantageous conditions for our economy, using the most effective transport means, namely, the oil pipeline.

Soviet aid to the CEMA member countries in meeting their needs, especially in energy, is documented by the volume of deliveries in 1976-80, within the framework of long-term trade agreements. This involves 375 million tons of oil, 46 million tons of oil products (gasoline, airplane fuel, petroleum, motor oils, paraffin, and others), 88 billion cubic meters of natural gas, and 64 billion kWh of electric energy.

With respect to imports in the next five-year plan, we envisage that deliveries of oil and oil products from the USSR will be maintained at the 1980 level, even though conditions of producing this raw material have changed. New reserves are located in areas with arctic climate and their exploitation is as much as five times as demanding as in conditions of the European part of the USSR, both in terms of capital investment and technology, not to mention the human element. Conditions in these localities are quite different from production in, for example, Saudi Arabia where the cost of producing one barrel of oil is about half a dollar.

Increases in oil consumption by the Czechoslovak economy will essentially be supplied by imports from nonsocialist countries at world market prices. Also, we must be prepared for the possibility that even oil imported under long-term agreement with the USSR will in the future undergo certain price adjustments. This requires a reevaluation of the original plans for the utilization of liquid fuels in the energy industry, transportation, and other branches, and bringing them into harmony with the realistic possibilities of Czechoslovak economic development. The price of oil, as well as its physical sources on the world market, will depend on the course of the energy crisis in the capitalist world, but also on the development of the political situation and events in the Middle East, and possibly in other areas.

Lowering the Growth Rate in Oil Product Consumption

The favorable price development of oil imported from the USSR, especially increased deliveries, enabled us to expand the utilization of all oil products. An overall analysis of oil use shows that the bulk of oil products are used for the production of heat, electricity, motor fuels and asphalts. The most promising and, so far, irreplaceable way of using oil is chemical processing which in the CSSR did not expand greatly until 1977, and will gradually double, following the introduction of the ethylene unit in Litvinov in 1980. The growing consumption of light products for chemical processing (liquid gas, gasoline, petroleum, and gas oil) will be met basically by existing oil sources. Given the fact that oil will become increasingly expensive and that the criteria for effective utilization of oil and petrochemical products, plastics, india-rubber, etc., will be increasingly demanding, we must draw appropriate conclusions regarding their management in all sectors of the national economy.

Utilization of oil byproducts as fuel in the CSSR will decrease in the coming years and will gradually be replaced by other sources. This stagnation in the first phase and decrease in the next, emanate from the global trend caused by the unfavorable price development, as well as gradual curtailment of production because of factors mentioned above.

In the interest of securing needed sources of light products with higher utility value than can be acquired by oil refining alone, the developed capitalist states and most of the CEMA countries have focused on broader

processing of oil through the so-called secondary sources. With the aid of modern technology it is possible to manufacture from residual oil, which so far has been used for heating, high octane gasoline, motor oil and other products needed more than the original raw material. Given the overall stagnation in oil processing, it is only in this manner that it will be possible in the CSSR in the future to lower the consumption in fuels and secure the propellants which are virtually irreplaceable to the extent required by current needs.

Problems of Savings in Propellants

When we consider that buying a million tons of oil from nonsocialist countries represents, at the 1980 price level, about 310 million dollars, it becomes understandable that the Czechoslovak economy must orient itself toward savings in all types of oil products. If we analyze consumption in the course of the Sixth Five-Year Plan, we see that in many respects it developed spontaneously and the trend was not reflecting the new conditions which emerged in the world oil market after 1973. The sharp increase in private automobile travel, and public road, rail, and air transport, was reflected in the growth in consumption of propellants. Considerable increase in utilization was not always sufficiently justified, and in some areas there was uneconomical usage. Nevertheless, until 1978 it was possible to satisfy all these needs without restriction.

Significant annual increases were registered in diesel fuel where, especially consumption for heating and electricity production showed inordinately rapid growth. Given the relatively large difference in price, uncontrolled sale of propellants enabled some socialist industries to heating oils for certain types of solid fuels. Heating oils had been intended exclusively for the purpose of keeping the population supplied with heat.

The trend in the consumption of diesel fuel, which comprises more than 25 percent of the overall amount of processed oil, indicated that without planned regulatory measures in consumption, it will not be possible in future years to guarantee steady supply for all branches of the national economy. For this reason, in approving the 1979 plan, the government decided to limit its consumption by major users. Following evaluation of the first year since the introduction of appropriate ceilings, we can say that, even though the response by users is so far not commensurate with the current price relationships on the world market, the goal of the plan to halt increases in the use of motor oil, was essentially met. Following a period of annual increases throughout the Czechoslovak economy of 6 percent, the trend has been virtually halted.

Regulatory Measures in 1980

In 1980 we must face the existing situation on the world market and be prepared for further intensification of economic measures in the whole structure of oil products. The system of consumption ceilings is being

expanded to the entire socialist sector in gasoline and, in relation to this, the plan also calls for lower consumption of motor oil. With respect to gasoline, this means a substantial curtailment--about 18 percent, compared with 1978--which will require a whole set of rationalization measures in technological consumption and, above all, a considerable reduction in passenger transport in the socialist sector. The consumption of asphalts was also specified in detail in the formulation of the plan. Along with this, related production will be strengthened (as, for example, cardboard and asphalt products) at the cost of not always economical maintenance and reconstruction of road surfaces.

Methods for the Near Future

Lowering of oil product consumption which, following the introduction of regulatory measures, was implemented largely by organizational intervention in the consumption system, should be resolved in the following important areas by means of thoughtful concepts:

--in structural development and quantity of oil-consuming appliances and their modernization;

--in more economically efficient operations using oil;

--in resolving the effects of slower growth of oil product consumption in related branches;

--in preparing systematic measures in management and the rewards program with the aim of lowering the consumption of oil products in absolute terms.

One of the basic tasks is a substantial lowering of the trend in the consumption of motor oil which represents over 25 percent of the overall balance of processed oil. Since the bulk of motor oil is consumed in freight road transport, we must guarantee its rationalization. The basic goal of rationalization measures is to achieve the planned dynamism performance, without any increases in consumption of propellants, tires, and the number of workers. In road transport which includes public transport of the CSAD [Czechoslovak Automobile Transport], plant planned and unplanned transport, and transport of agricultural organizations, we have experienced certain anomalies. Instead of strengthening CSAD public transport which uses 55 percent less propellant per 1 kilometer than plant transport, its share in road transport in 1978 was 5 percent less than in 1971. As a result, roughly 40 percent of all freight and special vehicles today operate outside the framework of statistical monitoring of their performance and utilization effectiveness. This state of affairs is quite unsatisfactory, not only with respect to propellant consumption, but also with respect to management of economic development. It is therefore necessary to search for methods and means which will gradually increase the effectiveness of transport equipment and performance which are now not monitored by the plan.

In order to raise the share of public automobile transport which, from the point of view of social effectiveness is most desirable, we need to focus on the resolution of the following problems:

--division of transport labor in road freight transport between public and plant road transport, along with consistent strengthening of planned road transport;

--increased role of the center in planned development of CSAD public automobile transport;

--intensification of closer targeting of plant transport with the aim of better satisfying transport requirements;

--consideration in all components of automobile transport of the need for a purposeful, more efficient utilization of trailers and semi-trailers by lowering the percentage of unproductive trips (apply sanctions against drivers who ignore the directive on vehicle inspection);

--issuing binding consumption norms for all types of transport equipment;

--allotting available road transport vehicles to those sectors which practice rationalization of utilization;

--rate performance fulfillment, along with savings in propellants, in the system of material incentive in automobile, rail, river, and air transport;

--explore the feasibility of transferring certain road transport operations to river transport.

In accord with the tasks which road transport must perform in the Seventh Five-Year Plan, the Federal Government directed the Federal Ministry of Transportation and central transportation agencies of the republics to prepare a complex program of freight automobile transport for 1981-85, including stabilization, and/or minimum increase in the use of propellants and tires.

In the building industry which ranks among branches with relatively high consumption of propellants, the following has great influence on economizing:

--composition of the vehicle and machine assets,

--technological level of the engineering inventory,

--settling producer-consumer relations, especially in allocation of sources, and economical transport of materials and products.

Replacement of the vehicle and engineering assets is limited by the capabilities of deliveries, both domestic and imported, from nonsocialist

countries. However, because there are shortcomings similar to those in freight transport, it is necessary to focus on their elimination and on raising the effectiveness of operations.

An important source of savings in the branches of the transportation ministries is the settlement of producer-consumer relations where the crux of the problem lies in:

--supply of construction materials from domestic sources;

--optimum earth removal;

--utilization of seasonal free capacities in rail transport.

Since the building industry, aside from its own plant transport, is a branch which in large measure participates in CSAD public transport, it was decided that we should prepare a program to reduce to a minimum the production and transport of clay in the planning and implementation of capital investment formation, so that the extent of production and transport operations would remain on the 1980 level.

Agriculture and the food processing industry are sectors with a distinct character where statistics conducted to date insufficiently define consumption in the allocations needed for setting directions which will be decisive in terms of rationalization.

Based on assessment by the branches, the basic sources of savings in the consumption of propellants for the coming period, lie in the following measures:

--transfer of additional branch organizations to planned plant transport, the relative pricing of which forms the basis for monitoring propellant consumption and organizing savings;

--gradual structural changes in and renewal of the transportation inventory;

--replacement of tractors used for road transport with trucks;

--expansion of the method of sowing without plowing;

--minimizing operations in field work, especially plowing and cultivation;

--economic reassessment of the expected volume of pressed produce and fodder production and its reduction to an economically effective minimum;

--improvement of the technical condition of vehicles through the necessary range of general and medium overhauls;

--ensuring availability of spare parts and batteries.

In addition to rationalization of propellants used by the major consumers, all branches must check on any other utilization of gasoline and motor oil, such as heating, electricity production, needs of certain technology with high energy demand, where it will be necessary to gradually exclude fuels produced from oil and replace them with other sources of energy.

An important share in the Czechoslovak fuels and energy inventory consists of deliveries of light heating oils, low-sulphur oils, and residuals oils, which represent about 50 percent of processed oil. Even though the demands of the national economy in fuels and energy are rising, deliveries of heating oil will remain at their present level during the Seventh Five-Year Plan, and the level in light- and low-sulphur oils will be lower.

At the same time, it is necessary in this period to create conditions in heavy heating oil consumption for its gradual curtailment, especially in electricity and heat production, and thus achieve a corresponding amount of heavy oil derivatives as a raw material for secondary processing into propellants. Current technology in oil processing does not permit us to reduce proposed oil imports while consumption of propellants is rising. It is therefore necessary to decide in time not only on the construction of a cracking unit but, especially, make enough residual oil available for this purpose.

Prospects in Oil Processing

If we consider that by 1975 about a third of all known oil reserves in the world had been exhausted and that since then consumption has significantly increased, the prospect for the branch which processes oil is not optimistic. Even though the share of the OPEC countries in world oil reserves is 59 percent and that of the socialist countries 10 percent, all economically-advanced countries recognize that the supply of oil is not inexhaustible. In addition to measures cutting import, these countries are focusing on research and the search for substitute energy and raw material sources.

In accord with the global trend, the Czechoslovak economy is passing from extensive utilization of sources toward their intensive reassessment. A part of this strategy is also the planned stabilization of oil product consumption, while maintaining the dynamism of economic development, as well as reliance on chemical processing of oil derivatives as the most effective method of oil reevaluation.

As stated in the report of the Presidium of the CZCP Central Committee at its Fourteenth Session in December of last year, "in the past 4 years, there have been further changes on the world markets which--especially the new rise in the prices of raw materials, fuels, energy, and foodstuffs in the nonsocialist countries--we have not anticipated to such a great measure. This development further underscored our own shortcomings in overall performance, effectiveness, slow application of scientific and technological development and, generally, in the adaptability of our economy to more stringent conditions."

in view of the growing difficulties in obtaining the needed quantities of oil and oil products, focusing on more rationalized management and qualitatively higher cost efficient oil utilization, is one of the factors governing a dynamic future development of the Czechoslovak national economy.

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NORTHERN BOHEMIA COAL, ENERGY PROBLEMS DISCUSSED

Prague HOSPODARSKE NOVINY in Czech 15 Aug 80 pp 8-9

[Article by Czech Planning Commission Staff Member Jaroslav Vejrazka: "Problems Transcend the Coal Mining Industry"]

[Text] The Guideline for the Economic and Social Development of the CSSR for the Years 1976 to 1980 emphasized the prime importance of the North Bohemia kraj as the state's fuel and energy base by calling for a total output of 68 million tons of brown coal in the North Bohemia coal basin in 1980. By way of comparison: the mere 28 million tons mined here in 1955 increased by 1965 to 48 million tons, 10 years later to 57.5 million tons and, in the fourth year of the current five-year plan, to a full 68 million tons. This development occurred at a time when coal began to be mined at a depth exceeding 100 meters at times. These exacting tasks raised considerable problems especially in the capital construction sector. The situation put in doubt the fulfillment of the plan by a shortfall amounting to roughly 1.2 billion korunas. Therefore, in the first half of 1978 central organs decided to look into the problems facing the North Bohemia kraj. After analyzing the situation, the governments of the CSSR and the CSR adopted measures for the last 2 years of the five-year plan. In 1979 the situation improved partly and the volume of completed construction projects rose by 10 percent. This can be viewed positively, but the serious situation concerning the filling of the Ervenice corridor persists: the 1978 shortfall was not eliminated. Moreover, the 1979 plan also remains unfulfilled. How will the situation develop in the last year of the Sixth Five-Year Plan?

The Guideline for the Economic and Social Development of the CSSR in the Years 1976-1980 called for finding a comprehensive solution to the deleterious impact of strip mining and the development of the energy base, especially

on the environment. The following facts will shed light on the situation. Two thousand two hundred apartments had to be replaced in the course of the Sixth Five-Year Plan. A number of communities had to be razed to make room for strip mining. The Most corridor was completed to permit the relocation of the rail line, highway, engineering network and the Bilina River to make room for the mining of high quality coal under the old city of Most. This complicated construction project required an investment of roughly Kcs 700 million and the movement of 1.7 million cubic meters of earth. Another important construction project started during the Sixth Five-Year Plan is the relocation of the Trebusice-Chomutov rail line as a prerequisite for continued progress and increased production of the Jan Sverma mine after 1983. This project will cost about Kcs 1.5 billion.

A second very important construction project involves the relocation of the Usti nad Labem-Teplice rail line which will open access to the new Chabarovice mine in the middle of 1982. This relocation will cost about Kcs 1.2 billion. Continued exploitation of the Ceskoslovenska armada mine is contingent on the elimination of the Drinov water works. Replacing it will cost about Kcs 1.1 billion and will require five construction projects.

The most important project under construction is the Ervenice corridor. This corridor is being built by the mining method (uncompacted) by dumping 400 million cubic meters of earth into the more than 100-meter high earth body.

Coal mining and the construction of new power plants in the Sixth Five-Year Plan will require an overall investment of Kcs 5.5 billion, representing one sixth of all contracted construction work on the North Bohemia territory in the Sixth Five-Year Plan.

Further, the Guideline for Economic and Social Development of the CSSR in the Years 1976-1980 calls for starting the production of a pipe extrusion and a pipe finishing plant from special steels at the Valcovny trub a zeleza Chomutov (Chomutov Pipe and Iron Rolling Mills) and for continuing the construction of the petrochemical complexes at the SCSP Chemical Works in Litvinov. Rail transportation capacity must be increased, the lines must be electrified and automated. To stabilize and increase the labor force will require the construction of 53,000 to 55,000 apartments with all necessary technical facilities and services.

The above survey of fundamental tasks reveals that in the North Bohemia kraj the principal aim of the Sixth Five-Year Plan has shifted to capital construction. Therefore, a separate document was prepared to secure financing of the necessary construction work in the years 1976 to 1980 which was approved by the CSSR Government Presidium by resolution No 251/1976 and the CSR Government by resolution No 295/1976.

Protection of the environment was not forgotten and the respective separate document was approved by the CSSR Government Presidium and the CSR Government.

The Results of Intensified Mining

The unfavorable situation in the area of fuel and energy resources began to be felt in our country as long ago as 1976, which led necessarily to an increase in the volume of mining above the original targets set by the Sixth Five-Year Plan. As a result the construction program had to be expanded which in turn required additional capital funds, an increased labor force and additional needed housing construction (the requirement was raised to 58,000 apartments). Proposed measures required to increase the volume of coal mining were adopted by the CSSR Government Presidium by resolution No 215/1977.

In 1976 and 1977 the situation became even more involved as a result of the functional shortcomings of the newly introduced giant diggers especially in the M. Gorkiy mine, which threatened to cause a shortfall of almost 40 million tons of coal. To maintain the volume of coal mines at the required level, the Most, Merkur, Lezaky and J. Sverma mines had to make up for part of the shortfall even at the risk of reducing the lead of overburden removal over the advancing mining front. For example, the Most mine accelerated its stripping progress so markedly that even under the difficult conditions where the old City of Most had to be demolished to permit mining, it produced in 1978 a full 3.3 million tons, compared with the goal of 1.8 million tons planned originally.

In this period in most cases the volume of coal mined increased at the cost of proper technical preparedness of the mines, especially of overburden removal. This also increased the pressure on the removal or relocation of objects which stood in the way of mining progress. Since this fast mining pace was not foreseen, replacement construction was mostly not included in the Sixth Five-Year Plan. A typical example is the replacement of the Drinov water works, where the replacement projects were originally scheduled to go gradually into operation in 1982: today this deadline had to be moved forward to 3 years.

To ensure the output by the Nastup Tusimice mines the relocation of the Chemutov-Prunerov rail line had to be completed ahead of schedule. The measures adopted to increase the volume of mining by shifts within the basic had necessarily deleterious repercussions also on capital construction, specifically on preliminary and project preparation, and on actual construction. Therefore, adequate measures had to be taken also in this sector.

The CSR Government and the Czech National Control Commission discussed the progress report on the fulfillment of tasks in the North Bohemia kraj in the first 2 years of the Sixth Five-Year Plan, as early as June 1978. The evaluation revealed a number of shortcomings, especially in capital construction. It further became obvious that in some sectors the program adopted for the development of the North Bohemia kraj is not continually being fulfilled. All this could potentially have a deleterious effect on coal output, power output, rail and highway transportation and the programmatic targets in developing the territory.

Reacting to this report the CSSR and CSR Governments requested the submission of proposals aimed at improving the situation in the years 1979-1980. The measures proposed were designed to catch up with the implementation of tasks which remained unfulfilled in the first 3 years of the Sixth Five-Year Plan.

The Causes of the Unsatisfactory Situation

An analysis of the situation revealed that the failure to fulfill the plan was due to the following principal causes:

--Unsatisfactory preparation of construction projects in the field and poor design work, especially in the first years of the five-year plan, as compared with the requirements of the capital construction plan. This was why the construction of a number of projects had to be postponed or replaced by other projects. This complicated in large measure the actions of suppliers and customers: suppliers on one hand chose construction projects which suited them, but on the other hand were forced to accept implementation of projects for which they had no proper project documentation. In housing and special purpose construction, for example, poor project preparation constituted an impediment to the full utilization of construction capacities.

--The planned increase in construction capacities was not fulfilled; the necessary shifts of capacities were not carried out, emergency help and worker transfers had to be organized within the enterprises. Construction capacities were not pooled to the extent needed or in the required structure. The expansion of key construction organizations was limited to their own resources in the kraj. Without substantial help from the other enterprises of economic production units they were unable to fulfill the tasks assigned them. The North Bohemia Konstruktiva, whose assigned tasks exceeded by far its construction capacity, can serve as an example.

--The structural reordering of construction capacities was not adapted to the existing needs in a situation where the proportion of repairs and other work is rapidly growing, drawing off building capacities to the detriment of capital construction. This creates a condition where a plan financed with the amount "S" (capital construction, repairs and other work) is being fulfilled while the capital construction plan is now.

--The fulfillment of the plan was also affected deleteriously by the fact that the other oblasts of the state failed to render adequate assistance to the development of the kraj. The national priority of the North Bohemia kraj was recognized only formally. Local interests prevailed in negotiations regarding transfers, assistance ensuring the implementation of project construction work and organizing the recruiting of labor and apprentices.

The concluding of supplier-consumer contracts for 1979-1980 was an indication of the danger that capital construction in the Sixth Five-Year Plan would fall short by about Kcs 1.2 billion.

Measures for Completing the Five-Year Plan

On the basis of the results of the analysis the CSR and CSSR Governments adopted the following measures:

--Raise allocations to construction organizations for the capital construction plan by Kcs 259 million for the year 1979 and by Kcs 324 million for the year 1980;

--Transfer construction capacities from other krajs since the potential to increase capacities in the kraj has been exhausted, and set for specific organizations the volume of transfer needed to implement tasks at specific projects or their autonomous parts. Channel these transfers primarily to projects which are under construction to effect their quick completion;

--Designate beginning with 1979 the volume of work and deliveries for capital construction as a mandatory indicator of the state plan with the indicator of the overall fulfillment of construction tasks serving for orientation purposes;

--Free the North Bohemia Konstruktiva from its obligations in the peripheral oblasts of the basin and transfer these obligations to outside contractors respecting the already prepared project documentation;

--Transfer the Silnice enterprises, which are managed by kraj national committees, from other krajs to work on the construction of a selected highway network to the limit of Kcs 60 to 65 million and designate this construction work as a mandatory task of the state plan;

--Set a limit for the allotment of funds for the construction of housing in accord with the resolution of the CSSR Government Presidium No 184/1976 in order to ensure the establishment of the material production and manpower base for the construction industry in the kraj;

--Increase staff strength of organizations in the kraj under the jurisdiction of the CSR Ministry of Building Construction by 210 workers by a nationwide hiring campaign;

--Assign the capacities of building construction organizations on a priority basis to projects of the fuel and energy base, those designed to improve the environment or projects vital for the continued economic and social development of the oblast. Special attention must be paid to capital investments arising from coal mining needs, the completion of the relocation of the Chomutov-Prunerov rail line, the construction of the Most corridor, and other projects in the city of Most on which the mining progress of the Most mine depend, the temporary relocation of the Trebusice-Chomutov rail line, and the filling of the road bed of the Ervenice corridor. Further, ensure the construction of installations replacing the Drinov water works and the relocation of the Trebusice-Chomutov and Usti nad Labem-Teplice rail lines, and carry out the comprehensive housing construction and special construction projects of the national committees;

--Strengthen project managements by securing experienced specialists and organizers from other krajs to ensure proper execution of the construction work;

--Secure for construction organizations active in the kraj deliveries of trucks, building machines, supplies and assembly of technological installations for comprehensive housing construction on a priority basis;

--Beginning in 1979 assign to individual construction contractors the volume of capital construction work to be completed for the North Bohemia Kraj National Committee as a mandatory task to prevent further increase in the deficit of the national committee;

--Grant preferential wages and special bonuses in socially important construction projects in accord with resolution of the CSSR Government Presidium No 54/1975;

--Monitor construction work progress of selected civilian construction projects undertaken within the framework of comprehensive housing construction;

--Ensure the installation and servicing of fly ash separators and the adaptation of power plants as pollution control measures on a priority basis;

--Erect in 1979 one, and in 1980 three, nature schools as mandatory tasks of the state plan;

--Create a system of control indicators for the assigned tasks to be carried out by workers designated by the CSSR and CSR Government Commission.

Situation after 1979

A year has now passed since the government resolution came into force which makes it possible to assess how their stipulations and principles were complied with.

A basic prerequisite for developing the kraj is improving the quality of capital construction and its preparation by the investor and designer. The respective tasks were being implemented in a situation when the planned yearly increase in the volume of construction work after a long period of nonfulfillment rose from Kcs 220-230 million in years past to Kcs 981 million in 1979. Neither the supplier nor the investor were fully prepared for so exacting a task which therefore was expected to require many operative interventions. In the end the state capital construction plan was only 94.2 percent fulfilled, with the annual gain amounting to Kcs 586 million.

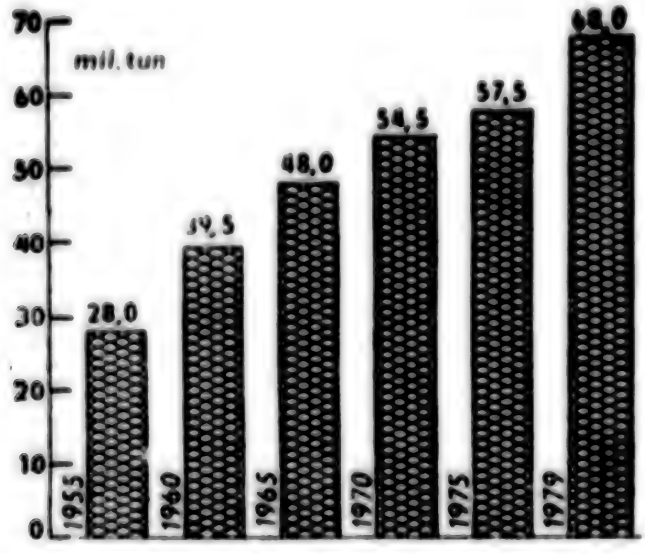
The failure to fulfill the state plan in 1979 had its repercussions on the results of the largest construction contractor on the territory of the North Bohemia kraj, the CSR Ministry of Building Construction, which fulfilled

only Kcs 388 million of the planned increase of Kcs 711 in capital work. Nevertheless, this is the highest increase ever achieved in the territory of the kraj. The main reasons for the failure to fulfill the plan lie primarily within the ministry, but external factors also played a role.

The primary internal cause for the failure was the inability to fulfill the plan in the first quarter when, as a result of extraordinarily adverse weather conditions the construction volume remained at the level of the first quarter of 1978. But the impact of bad weather cannot account for a whole year's result. Even though the Ministry of Building Construction constantly monitored the fulfillment of the plan and exerted pressure on enterprises to raise their goals by specifying output targets, the shortfall was not made up by the end of 1979.

The second principal cause of the failure to fulfill the plan is a shortage of construction capacities of the industrial and engineering construction sector. The planned reorganization of construction organizations has still not been achieved. But attaining a high planned increase of capacities was predicated on shifting construction capacities.

Construction capacities were not shifted for a number of reasons. The key factor was indecisiveness of general managements in making public interest prevail. Subordinate components and later even the general managements failed to abide by the ministry's order, and this undermined the ministry. The pressure for a shift of capacities also encounters artificial obstacles which must be dealt with once and for all by central organs irrespective of whether technology, complicated relations in the handover of completed construction projects, deliveries of materials, or deliveries by subcontractors are involved.



Mining output trend in the North Bohemia coal basin in 1955-1979.

In this connection we also need to mention the negative attitude some regional organs take when it comes to supporting a shift of capacities to the North Bohemia kraj, an attitude which is based on a lack of understanding and the pretext of having to cope with local problems.

One of the principal factors responsible for the failure of the CSR Ministry of Building Construction to fulfill its tasks is also the unstable situation of the Severoceska Konstruktiva enterprise, which is responsible for 79 percent of the ministry's overall shortfall. It appears that even this year no fundamental change in the prevailing situation can be expected without strengthening the enterprise with the best professional and politically most mature cadres from the entire economic production unit. The thrust of the enterprise's orientation and specialization will again have to be reconsidered. It cannot be expected to build everything from apartments to the most complicated industrial projects.

Among the external factors responsible for the failure of the CSR Ministry of Building Construction to fulfill the plan is also the failure of investor ministries to fulfill the planned construction volumes in the amount of Kcs 120 million.

In the course of the year in a number of projects additional time was lost by a delay in investor preparation and delays in handing over project documentation which necessarily affected also the fulfillment of the agreed-upon or set plan. The proportion due to lack of investor preparation amounts to about Kcs 80 million of the overall shortfall.

When the low gains of preceding years and the unfavorable conditions prevailing at the beginning of 1979 and other factors are considered, the increase of construction work in capital construction by 10 percent over 1978 can be considered a plus, even though the overall planned volume remains unfulfilled. The fourfold rate of growth of construction work compared to the mean overall rate of growth in the country testifies unequivocally to the gradual achievement of priority for the North Bohemia kraj.

As in Investments....

One of the objectives of the adopted resolutions was to fulfill the volumes of construction projects designated as mandatory tasks of the state plan especially in construction projects of the fuel and energy base and the respective investments. In assessing the year's results it can be said that the objective was carried out. The mandatory tasks of the state plan were fulfilled by 96.3 percent, even though no preparations were ready for some mining projects (such as homogenizing and crushing installations at the Chabarovice mine) and there was a 10 percent increase in the volume of work assigned over 1978 levels. The builders fulfilled not only the volume of construction, but also performed the material tasks.

In the course of the year the Ervenice coal transfer point, the electrified Usti nad Labem-Vranany rail line and the third track of the Bilina-Ceske Zlatniky line were put into operation; these projects were of considerable help in getting the coal out of the basin. The tasks of constructing power plant fly ash repositories were also fulfilled. Therefore, compared to last year, when power outages threatened, this year's winter passed without problems.

The successful completion of relocating the Chomutov-Prunerov rail line at the end of 1978 enabled the Nastup Tusimice mines to continue mining. Attention also focused on completing the Most corridor, a project amounting to an investment of Kcs 643 million. By opening the new line to traffic on 1 May 1979 the way was fully cleared for continued work in the Most mine, whose advance was blocked by the old right of way.

The construction of the Ervenice corridor and replacement projects for the Drinov water works constitute vital investments connected with mining. The completion of the Ervenice corridor will allow full-scale operation of the Ceskoslovenske armady and Jan Sverma mines. But a very serious situation arose during the filling of the corridor. The North Bohemia Brown Coal Mines organization failed to make up not only the 1978 shortfall, but also the 1979 shortfall. This caused a delay in freeing part of the areas needed for building the rail line, and mainly the relocation of the Bilina River. Failure to free the building site considerably complicates the progress of construction and the work piles up for completion in the last period.

In contrast, the building of replacement installations for the Drinov water works proceeded successfully. The planned tasks were exceeded also in relocating the Usti nad Labem-Teplice rail line, a key project in the basin. The project is being built by Dopravni stavby Olomouc [Transportation Projects Olomouc], which can serve as an example to other contractors not only for the way this contracting enterprise approaches the fulfillment of its tasks on the territory of the kraj and organizes work, but also for its care for its workers and technical cadres.

With the launching of construction of the new theater, the building of the new city of Most entered its final stage. In the course of the year Severografie was completed, two projects which now house Kancelarske stroje [Office Machines], Barum and Obnova; also the Severoceske energeticke zavody (North Bohemia power enterprises) the okres veterinary facility and the Debora establishment started operation.

To enable the uninterrupted advance of the Most mine the premises of the Okres Communications Administration and of Severoceske keramicke zavody (North Bohemia ceramic works) had to be moved temporarily because their new permanent premises were not completed within the deadline. The construction of special purpose projects such as the hotel, the house of culture, the industrial college, the okres library planned for Most were delayed indefinitely.

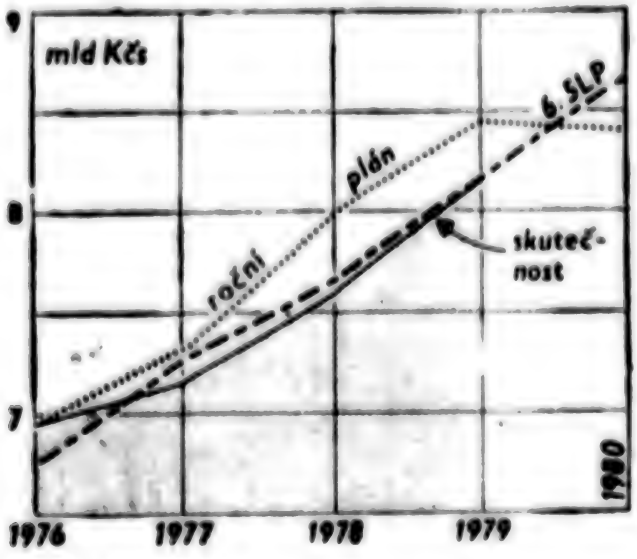
...and in Housing Construction?

On the whole, if we can be satisfied with the progress of projects carried out for individual ministries, such is not the case with the progress of capital construction for the North Bohemia Kraj National Committee, with a shortfall in construction work for 1979-capital construction of national committees amounting to Kcs 573 million. This again delayed fulfillment of the material program of the Sixth Five-Year Plan. Completing work worth Kcs 420 million, the CSR Ministry of Building Construction failed to deliver the greatest part.

This failure cannot be taken lightly because it recurs each year with serious repercussions for the living environment, especially in the basin's okreses, where it has a deleterious effect on peoples' lives. All economic managers, but also political workers from other krajs providing construction work for national committees in the North Bohemia kraj, should wake up to this reality.

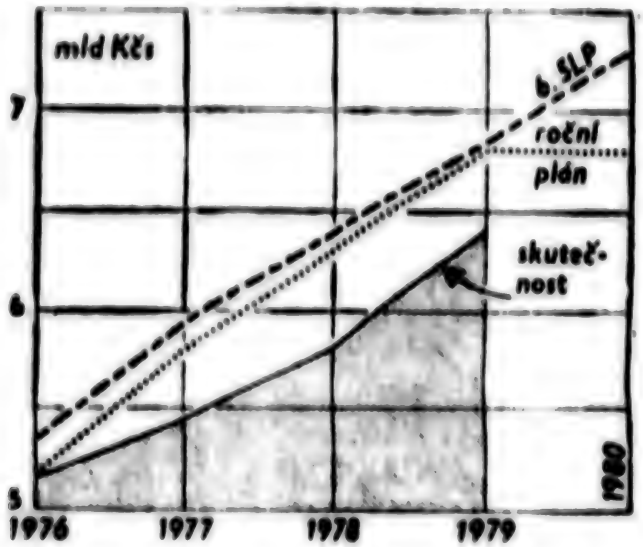
The only positive factor in 1979 was the improvement achieved in housing construction, where out of 11,018 apartments planned, 10,571 were completed. But the construction of the respective technical and service facilities large behind, with tasks fulfilled by only 64 and 71 percent respectively.

Overall volume of construction work in the North Bohemia brown coal basin done by construction contractors



Key: mld Kcs...billion korunas
rocni plan...annual plan
6.5LP...Sixth Five-Year Plan
skutecnost...reality

Volume of construction work on capital construction projects for the North Bohemia brown Coal Basin done by construction contractors



After initial difficulties the situation improved markedly in 12 selected government-managed comprehensive housing construction projects. Of five projects slated for completion, four were handed over completed. The Chomutov shopping center was not completed because of insufficient construction capacity of the North Bohemia Konstruktiva. The change in coal mining prospects in some parts of the basin also changed the housing construction plans. In the course of the year the Nove Sporice site, where by the end of 1979 the construction of 2,500 apartments was to begin, had to be abandoned. An alternative solution had to be found to meet the housing construction plan for 1980 and the subsequent 5 years. An alternative site was found by joint efforts of the Ministry of Construction and the North Bohemia Kraj National Committee. A similar situation also had to be resolved in the Teplice okres.

Throughout the year the construction of housing turned out to be extraordinarily difficult and suffered from considerable shortcomings. Even though these projects are designated as mandatory projects in the state plan, some were not properly prepared and difficulties arose also during construction. This was the case primarily in the building of heating installations, which is the responsibility of the Federal Ministry of Fuels and Energy, and in transportation projects, whose investor is the North Bohemia Kraj National Committee.

Selected highway network projects exhibited the greatest underfulfillment of the plan with only Kcs 77 million spent, of the stipulated Kcs 107 million. Here the unsuitable structure of construction organizations became most manifest as the result of excessive concentration of engineering capacities for the relocation of rail lines which left inadequate resources for the selected highway network project.

In accord with the government guideline, the 1980 plan was also prepared. To plan realistically capital investment was scaled downward on the basis of expected 1979 results. The output potential of the construction capacities of the CSR Ministry of Building Construction and its ability to transfer additional capacities and workers in 1980 were assessed realistically.

With the participation of supplier ministries a survey of the territory and of preparations by investors and designers was undertaken involving all central investors to ensure the implementation of developmental objectives by adjusting the volume of construction work. The survey revealed that the set volumes meet the necessary extent of planned and properly prepared capital construction on the territory of the kraj.

To master the unsatisfactory situation in the construction of civilian projects implemented within the framework of comprehensive housing construction a CSSR Government resolution on the 1980 plan directed the kraj national committees, excepting the national committee of the City of Prague and the North Bohemia kraj, to render assistance by okres construction enterprises in the amount of Kcs 60 million.

The adopted government resolutions, No 273/1978 and No 316/1978, create favorable conditions also in 1980 to ensure the uninterrupted construction of mining and power supply capacities, the establishment of the Czechoslovak uranium mining industry in the Ceska Lipa region, and the construction of power plant fly ash repositories. Attention focuses also on securing funds for emergency investments and investments for housing construction.

8664
CSO: 2400

BRIEFS

OLEAGINOUS PLANT SELF-SUFFICIENCY PLANNED--Per capita consumption of pure fats in Czechoslovakia, as food, will reach about 25 kg in 1980, approximately 70 percent higher compared with the pre-WW II statistics. In 1936, the percentage of animal fats amounted to 70.2 percent of the total pure fats consumption; the current figure is 58.4 percent. In 1979, the per capita consumption of vegetable oil and fats reached 9.8 kg. During the first four years of the Sixth Five-Year Plan, the average CSSR annual production of oleaginous plant seeds reached 162,000 tons, a 30 percent increase compared with the Fifth Five-Year Plan annual average. Still, in spite of increased yearly production, 60 percent of raw materials for production of vegetable oil and fats have to be imported. The 1980 plan calls for production 240,000 tons of oleaginous plant seeds; of this 190,000 tons of rape, 25,000 tons of sunflower, 15,000 tons of flax and 2,500 tons of soybean seeds. The figure also includes 7,500 tons of poppy seed, mustard seed and other raw materials not processed by the industry producing vegetable oil and fats. Estimated 1985 production of oleaginous plant seeds calls for 287,000 tons, reaching 300,000 tons in 1990 and thus hopefully reducing the current level of exports by two-thirds. [Bratislava ROLNICKE NOVINY in Slovak 27 Aug 80 p 4]

GASOLINE CONSUMPTION--In 1979 a total of 398,000 tons of gasoline for cars were sold in Slovakia; 58.3 percent of this was sold to private car owners. The percentage is expected to increase to 62.7 percent in 1980. At present 290 gasoline stations are operating on Slovak territory; the average distance between stations is less than 20 kilometers. This year socialist organizations are expected to save a full 25 percent of the 1978 level of gasoline consumption, resulting in consumption at the 1971 level. Private car drivers are expected to save enough gasoline to reach the 1978 consumption level. Slovakia now has no gasoline stations on the super highway; stations are planned for sections between Bratislava and Lamac, and between Sekule and Zelenec. The realization of this plan depends on the financial means allotted by higher bodies. Bratislava now has 15 stations, which is not enough; the target of having 30 stations is being constantly delayed due to the lack of finances, and only 10 new stations at most will be built in Bratislava during the seventh 5-year plan. [Bratislava SMENA in Slovak 9 Aug 80 p 3]

SUGAR BEET HARVEST--In the Czech Socialist Republic sugar beet was sown this year on more than 157,000 hectares; 45 percent of this acreage was sown with genetically one-sprout seeds. But crops had to be plown under on roughly 3,500 hectares because of late sowing, dry weather in May and excessive moisture in June. At present 26 percent of the acreage is in very good condition; 38 percent in good condition; more than 25 percent satisfactory, and more than one tenth of the acreage is in bad condition. The largest acreage--4,700 hectares--awash with ground water is in Eastern Bohemia. [Prague PRACE in Czech 12 Aug 80 p 1]

FOREST CALAMITY--Current timber losses by natural causes in the CSR forests are the worst experienced since WW II. This year's damage amounts to about 80 percent of the annual lumber production. Most of the damage is in forests of the South, West and Central Bohemia Krajs. Because of the huge amount of accumulated timber, its removal from forests is not expected to be completed prior to 1982. Organizational and individual help in form of work brigades is needed in reforestation of these areas. About 1.5 million cubic meters of wood is available in certain areas, where the populace is offered firewood and lumber through self-help. [Prague SVOBODNE SLOVO in Czech 9 Sep 80 p 4]

TRUCKS FOR MOROCCO--The AVIA Enterprise of Prague has built the first series of 50 of its A-15 trucks for Morocco, with the second series to follow in September. The trucks are adapted for use in rough terrain and hot climate. [Prague VECERNI PRAHA in Czech 21 Aug 80 pp 1, 2]

CSO: 2400

BUDGET ACCOUNTING FOR 1979 PUBLISHED

West German Commentary

Bonn INFORMATIONEN in German No 13, Jul 80 pp 11-13

[/'Background' report by FRG Ministry for Inner-German Relations: "GDR Budget Accounting for 1979 Approved by People's Chamber." The official budget accounting text as published in East Berlin NEUES DEUTSCHLAND follows this commentary/]

> [/Text/] On the occasion of its 11th session (3 July 1980), the GDR People's Chamber approved the Council of Ministers' budget accounting for 1979, as presented by new Finance Minister Werner Schmieder. This accounting of the state budget was once again published by the SED organ NEUES DEUTSCHLAND -- as was done for the first time last year with the 1978 budget. The volume of the budget (including social insurance) rose in 1979 to M 140.6, which means an increase of about 6 percent. To be sure, the budget plan for 1979 called for a volume of only M 137.4 and thus was exceeded by about 2 percent. By contrast, the rise in national income planned for 1979 could not be reached; it was around 4 percent.

The budget volume had already expanded at a greater rate than national income between 1976 and 1978. The government sector expenditure share -- or the share of the state budget in the GDR's national income or national product -- has increased from 79.9 percent (1976) to 83.9 percent (1979). This points up a growing direct influence by the state on the distribution and utilization of the national product.

Revenues

Revenues from the GDR's total public budget (= income of the central government, the bezirks, kreises and municipalities) amounted to M 125.7 billion last year. Including employee social insurance contributions and the share paid by employers (VEB's, combines, cooperatives, state

administration, in the amount of approximately M 14.9 billion, GDR state and social budget revenues totaled M 140.6 billion.

Compared to 1978, the GDR treasury obtained a 6.3-percent increase in pure budget income in 1979 (excluding revenues from social insurance contributions). Within the current five-year plan period (1976-1980), this figure constitutes the highest increase thus far for actual revenues in a single year. The rates of increase for state income amounted to 2.5 percent in 1976, 6.1 percent in 1977 and 5.7 percent in 1978.

The main sources of GDR budget revenues are the compulsory payments by state economic organizations (VEB's, combines, VVB's [associations of state enterprises]) and banks. These enterprise taxes are comprised primarily of payments by production organizations and banks out of net profits earned (= profits taxes) as well as production fund and inventory taxes (= taxes on working capital). In 1979, approximately 44 percent of all state income (excluding social insurance revenues) derived from tax payments by enterprises and banks.

The second most important source of revenue for the state budget in the GDR is the direct or indirect taxation of the public. In 1979, one-third of the revenues came from taxes on private income and from the tax burden on consumer expenditures by private households. Unique to the system of procuring revenue for the state in the GDR is the fact that the emphasis in tax contributions required of the citizenry lies with (invisible) indirect taxes -- in other words, with the sales and consumption taxes that are figured into the prices of consumer goods. The levying of sales and consumption taxes in 1979 brought the state about 28 percent of its total income. On the other hand, revenues are comparatively small from the tax on wages and salaries and from the income tax for "free-lance members of the intelligentsia" on income derived from independent work. Their contribution to the procurement of funds by the state has for years amounted to a mere 5 percent of the total tax bill (M 6.6 billion).

By contrast, private artisans in the GDR pay heavy taxes. In 1979, the state treasury took in revenues of around M 2.7 billion from payments made by this group of taxpayers. This amounts to a somewhat greater than 2-percent share of the total revenues of the GDR's unitary budget (excluding social insurance contributions). Thus, for example, the taxes paid by private artisans are twice as high as the agricultural taxes paid to the state by "socialized agriculture" (LPG's and VEB's together).

The tax payments of private artisans are also considerable when compared to the tax revenues which the treasury receives from all artisan producer cooperatives (PGH) and the various other types of "socialist cooperatives" that exist: For instance, the private artisan enterprises pay not much less in taxes than do the collectivized artisan trade, the consumer cooperatives and all other forms of cooperatives (excluding LPG's) combined,

which together contributed the sum of approximately M 2.9 billion to the state treasury in 1979.

Expenditures

Heading the list of expenditures in the budget accounting are those for social insurance, with M 27.4 billion (+ 3.0 percent). Excluding social insurance expenditures, but including supplements credited to social insurance, the volume of expenditures amounts to M 126 billion (+ 7.0 percent).

The importance of investments and outlays for science and technology, repeatedly stressed by the GDR government and media, is not reflected in the budget accounting. On the contrary, the development of expenditures in this sector is below average; there was even a further absolute decline in such investments financed out of the state budget in 1979. They amount to M 6.1 billion, after having been pegged at M 6.5 billion in 1978 and even M 7.0 billion in 1977.

Subsidies

Approximately half of the indirect increases in income granted to private households out of the state budget in 1979 (in the form of setting prices and rates below the costs needed to produce goods and services) were used to cut the cost of foodstuffs. About 28 percent of the subsidies that benefit the public directly were needed to bring down retail sales prices for sociopolitically important goods, to cut the purchase price for household fuels and to fix the rates for gas and electricity at low levels. Among the many industrial goods for which the government grants to the public retail prices that are below the actual cost of manufacture are baby clothes, clothing for young children, children's shoes, baby carriages and strollers, books, newspapers and pharmaceuticals.

The largest increases in budget subsidies since 1975 are the additional payments for the combined entry entitled "Price supports for industrial goods, household fuels and energy rates." The GDR government was able to get by with subsidies amounting to about M 1.2 billion in 1975, but it was already costing the government the sum of M 2.9 billion in 1979 to maintain the stability of ultimate consumer prices for this group of goods. Compared to 1978, an additional amount in the neighborhood of M 1.5 billion had to be spent in 1979 to assure stable prices and rates in this sector.

The most important reason for this increased need for subsidies is the tremendous rise in the cost of producing electricity, gas and household fuels. And these increased costs are in turn a direct result of the price explosion affecting raw materials and energy sources (especially petroleum) on the world market and in internal CEMA trade.

Revenues, Expenditures Listed

East Berlin NEUES DEUTSCHLAND in German 4 Jul 80 p 3

[Official text of "Budget Accounting for the Year 1979 -- Important Revenues and Expenditures of the State Budget"]

[Text] I. Revenues

	In millions of marks
Total Revenues:	140,633.4
Revenues from state enterprises, combines and VVB's:	
Payments from production fund taxes and inventory taxes	16,815.9
Payments from net profits	32,882.7
Payments from product-related taxes	34,975.8
Payments by banks	5,271.5
Taxes on agriculture	1,394.3
Revenues from agricultural facilities, especially state veterinary services	458.5
Land use fees	338.4
Revenues from water use fees and other revenues from water management directorates	165.4
Revenues from:	
Artisan producer cooperatives and other socialist cooperatives	2,859.8
Private artisans and tradesmen	2,665.5
Taxes on the wages of workers and salaried employees	6,586.5
Revenues from research by the Academy of Sciences as well as by advanced schools	406.2
Rental revenues of municipal communal housing administrations	177.4

Revenues from state educational institutions, particularly for room and board and fees	671.6
Including:	
Public education	368.9
Advanced and technical schools	267.0
Vocational training	5.8
Adult continuing education	29.9
Revenues from state health institutions	6,236.3
Including:	
Payment for health services through social insurance	5,037.4
Revenues from pharmacies and orthopedic stations	751.5
Other revenues, such as those from laundry services, contributions by parents to day-care centers, defrayal of costs at recreation centers and nursing homes	447.4
Social insurance revenues	14,902.8
Including:	
From the shares contributed by enterprises, state organs and institutions, cooperatives	8,478.4
From worker contributions	6,424.4
Revenues from state cultural, recreational and sports facilities as well as youth facilities	615.9
Including:	
Culture	453.1
Recreational and sports facilities	137.7
Youth facilities	25.1
Radio revenues	111.9
Television revenues	381.0
Revenues from communal measures and services	162.2

Fees and other administrative revenues of the state apparatus and economic management organs	261.5
Municipal taxes	536.1

II. Expenditures

	In millions of marks
Total Expenditures:	140,222.6
Budget funds for science, technology and research facilities	2,306.1
Including:	
Funds for science and technology in state enterprises and combines	1,000.7
Funds for science and technology in the field of agriculture and forestry	313.5
Funds for research and development in state institutions and facilities	991.9
Including: Research expenditures of the Academy of Sciences	480.6
and of the advanced and technical school system	399.7
Budget funds for research in the social sciences	176.5
Budget funds for financing investments	5,614.9
Expenditures for the maintenance and repair of transport routes (roads, waterways, railways, seaports, inland harbors and airports)	3,024.3
Product-related price supports for raw materials and base materials	5,180.0
Price equalization fund for industrial enterprises for the temporary equalization of effects of scheduled industrial price changes	1,065.8
Subsidies to agriculture for soil improvement, investment credits, product-related price markups and other measures designed to encourage production	2,341.0

Product-related price supports for means of production for agricultural enterprises	5,156.0
State expenditures for agriculture and forestry, such as veterinary medicine, crop protection, special schools, exhibitions	581.3
Expenditures for recultivation measures	15.9
Expenditures for water management	556.8
Expenditures for housing	6,708.4
Including:	
Expenditures for new housing construction, including new social facilities	1,865.5
Expenditures for the modernization of residential structures	230.0
Construction repairs on existing housing	1,053.3
Expenditures for administering and managing existing housing	1,553.9
Credit allowance for young married couples, as well as interest deductions for the use of credits	188.1
Interest on and retirement of investment loans for new housing construction	1,817.6
Price supports to assure stable prices for basic goods and rates for the public	15,726.8
Including:	
Food	7,721.8
Industrial goods	4,415.2
Long-distance and local passenger fares	2,674.8
Drinking water and sewage treatment fees	676.3
Repairs and services	238.7
Expenditures for minor price adjustments and seasonal measures	161.8

Expenditures for education	9,674.9
Including:	
Expenditures for public education	6,799.3
Including:	
Instructional and learning aids and toys	186.7
Meals for schoolchildren and younger children	866.3
Transportation of schoolchildren	141.5
Advanced and technical schools	1,984.0
Including:	
Scholarships	455.2
Expenditures for boarding schools	108.1
Meals for students in dining halls	105.0
Vocational education	797.1
Facilities for continuing adult education	94.4
Expenditures for health and social affairs	9,259.4
Including:	
Expenses for hospitals	3,280.8
Expenses for polyclinics, out-patient clinics and general practices	1,832.6
State aid to minor dependents and maternity benefits	1,363.2
Supplementary payments to large families	83.0
Expenses for recreation centers and nursing homes	522.4
Expenses for providing the elderly with housekeeping services and noon meals	173.2
Social insurance expenditures	27,375.3
Including:	
Pensions	14,383.8
Sick benefits	3,598.3
Pregnancy and maternity benefits	698.0
Aid to mothers for paid leave (baby year)	259.8
Expenditures for youth facilities, including tourism	100.0

Expenditures for culture	1,599.1
Expenditures for sports facilities	328.2
Expenditures for recreation and vacation services	392.9
Subsidy for foreign tourism	273.0
Municipal measures and services; for example, street lights, trash pickup, maintenance of parks and open space	819.7
Expenditures for radio	197.8
Expenditures for television	472.4
Expenditures for state apparatus and economic management organs	3,719.1
Civil defense and fire protection	114.0
Expenditures for national defense	3,674.0
Expenditures for public safety, the administration of justice and securing the state border	3,474.0

7459
CSO: 2300

DEVELOPMENT OF INLAND WATERWAY SYSTEM REVIEWED

East Berlin PRESSE-INFORMATIONEN in German No 97, 15 Aug 80 p 6

[''Facts and Figures'' report by Press Office, Chairman, GDR Council of Ministers: "The Inland Waterways of the GDR"]

[Text] Today, the inland shipping of the GDR has at its disposal a waterway system with a total length of 2,546 kilometers. Of this, 1,680 kilometers can be navigated by ships having over 800 tons of capacity. The most important waterways are the Elbe, with a total length of about 1,300 kilometers, of which 566 kilometers either lie within the GDR or form part of the national border with the CSSR and the FRG, and that section of the Oder, 161.7 kilometers in length, which forms the national border with the Polish People's Republic. In addition to these there are connecting waterways between the Elbe and the Oder such as the Elbe-Havel Canal and the Lower Havel Waterway. Other important waterways are the Mittelland Canal, the Hohensaaten-Friedrichshaler Waterway, and the Saale. The waterway system also includes rivers such as the Unstrut, the Elde, and the Lusation Neisse, which however have only minimal significance for shipping.

An example will give an idea of the extent of the waterways in the GDR. The distance along the waterway between Eisenhuettenstadt on the Oder and Niegripp on the Elbe amounts to 255 kilometers. Given an average traveling speed of 8 kilometers per hour and taking into account the times spent passing through locks, about 37 hours of travel are needed for this journey.

For decades now, extensive regulating measures have been carried out with respect to the rivers in the territory of the GDR. Back in the 19th century, interconnections had already been established between the individual river and stream systems through the canalization of rivers and the cutting of canals. The completion of the interconnections between the Elbe and the Oder, which include the Elbe-Havel Canal, the Havel-Oder Waterway, and the Spree-Oder Waterway, caused traffic along the waterways to increase substantially.

[illegible] of the GDR entered in a new stage of development for the inland shipping. First of all, the destruction caused by World War II had to be eliminated in order for inland ships to be able to run again at all on the waterways of the GDR. Numerous bridges had been blown up, and a large proportion of the vessels of the transport fleet had been sunk and thus blocked the waterways. Locks, weirs, embankments, levees, and so forth showed extensive damage and had to be restored. After the worst of the wreckage had been cleared away by an enormous effort, the working people of the waterways administration set about the systematic reconstruction of all facilities. By the beginning of the 1950's, the 12-kilometer-long Havel Canal had already been built, thus establishing a beneficial link between the Lower Havel Waterway and the Havel-Oder Waterway.

On the Elbe, the water depth amounts to between 2 meters and 2.40 meters at medium water level. It is primarily dependent on the supply of water from the respective catchment basins of its tributaries. In May and July of this year, shipping had to be banned because the river overflowed its banks, became difficult for the navigation of ships, and was flowing too fast. In such cases, the clearance heights under the bridges are too small in some places.

In dry periods, the water depth can fall to values ranging around 1.50 meters. In the exceptionally dry year of 1964, the smallest depth was only 65 to 80 centimeters between the CSSR border and Boizenburg. With normal water levels, individual vessels 80 meters in length and 11 meters in width are allowed on the Elbe between Schoena and Boizenburg. Barge trains can have dimensions of up to 190 meters in length and 25 meters in width, depending on the water level and on the section of river. The depth conditons of the Oder are similar to those of the Elbe. Depending on the water level, loaded barge trains with a length of 156 meters and a width of 11 meters can be operated on this river.

Canals and canalized stretches of river have essentially constant depths. Thus, between the capital of Berlin and the Elbe, by way of the Lower Havel Waterway and the Elbe-Havel Canal vessels with a draft of 2 meters can be run continually. Between Berlin and Hohensaaten, the Havel-Oder Waterway is suited for individual vessels having a length of 67 meters and a width of 8.20 meters. The depth comes to 2 meters here. Barge trains with a length up to 135 meters and a width up to 8.20 meters are permitted on this waterway.

The connection between Berlin and Eisenhuettenstadt by way of the Spree-Oder Waterway can be passed through by individual vessels with a length of 67 meters and a width of 8.20 meters. For barge trains, the permissible size is 123 meters in length and 8.20 meters in width. The designed draft is 1.85 meters, and for machine-driven vessels it is 1.75 meters. The other principal waterways have similar proportions.

All the canals and canalized stretches of river have locks and ship elevators. The most important and at the same time most interesting structure here is the ship lift at Niederfinow near Eberswalde. This lift overcomes a height difference of 36 meters. The second ship elevator is located at Rothensee near Magdeburg and overcomes a height difference of between 11 and 18.50 meters, depending on the water level of the Elbe.

Numerous locks are located along the individual waterways. The Brandenburg lock is one of the most extensively used of all large locks, having two coffers 210 and 170 meters long. The twin chamber lock of Eisenhuettenstadt has two coffers 130 meters long and 12 meters wide. The height difference between the upper and lower water level is between 9 and 14.2 meters, depending on the water level of the Oder.

Of course, the GDR's waterways are not restricted to serving as a traffic channel for transport shipping. For example, industry takes coolant water from them, and agricultural operations partly supply their sprinkler systems with water from the rivers and canals. In the summer months, many citizens use these waterways for outings with the White Fleet or for water sports. Then there is a lively bustle above all on the Mueritz-Elde Waterway, the Mueritz-Havel Waterway, and the Upper Havel Waterway. In these areas, numerous working people find relaxation every year.

1114
CSO: 2300

CROP, WEATHER REPORT PUBLISHED FOR JUNE 1980

East Berlin FELDWIRTSCHAFT in German Vol 21 No 8, Aug 80 p 384

[Article by Dr D. Krumbiegel, GDR Meteorological Service, Central Weather Bureau, Potsdam]

[Text] The Weather in June 1980

Subnormal air temperatures at the beginning of the month and after 18 June included a warm weather period. Rain was unusually frequent and especially abundant in the northern GDR. There was not much sunshine.

During the first two 10-day periods daily average air temperatures only on a few days deviated by more than 3 K from normal values. Between 22 June and the end of the month anomalies of usually between -3 and -5 K occurred. The weather period that was too warm generally brought in daytime maxima above 20°C. Values around 25°C were recorded widespread on 5, 9, 10 and 13 June. On 14 June, maxima went up to 32°C locally. For the rest of the time, maxima mostly ranged between 15 and 20°C, at the end of the month they often even dropped below 15°C. Night ground minima dropped below 5°C only in the first few days of the month (1 June recorded -1°C in the Cottbus area). Thereafter they mostly ranged around 10, and during the third 10-day period between 5 and 10°C. Only the first 10-day period had much sunshine in the northern GDR. The second part of the month was marked by very little sunshine.

Only two days (4 and 6 June) remained completely without rain in the entire area. The rest of the time brought in a lot of rain, with showers predominating. In the second 10-day period the rain was most abundant. Altogether, the northern GDR got more rain than the southern. Frequently there were daily volumes between 30 and 60 mm (Schwerin got 112 mm on 11 June). There were between 5 and 8 days with rain volumes around 3 mm widespread in the second and third 10-day period. Schwerin got the extreme monthly volume of 234 mm (= 442% of the normal value).

Temperature Data for June 1980 according to the Chief Climatological Office, Potsdam

1. Monthly Average Air Temperatures and Deviations from the Norm

Schwerin	15.2°C	-0.4K	Erfurt	14.5°C	-0.7K
Neubrandenburg	15.0°C	0.0K	Leipzig	15.9°C	+0.1K
Potsdam	16.1°C	-0.2K	Goerlitz	15.2°C	-0.4K

2. Mean Precipitation according to Bezirks

Rostock	122 mm	= 235%	Halle	70 mm	= 127%
Schwerin	129 mm	= 235%	Erfurt	99 mm	= 160%
Neubrandenburg	144 mm	= 215%	Gera	92 mm	= 133%
Potsdam	89 mm	= 165%	Suhl	111 mm	= 156%
Frankfurt	107 mm	= 195%	Dresden	84 mm	= 106%
Cottbus	87 mm	= 143%	Leipzig	76 mm	= 121%
Magdeburg	97 mm	= 187%	Karl-Marx-Stadt	76 mm	= 87%

3. Evaporation Potential

Northern Bezirks	60...75mm
Central Bezirks	70...90mm
Southern Bezirks	60...80mm

Soil, Crop and Labor

Toward the middle of the first 10-day period, surface soil temperatures rose to around 20°C. On 18 June the ground started cooling off rapidly. In the third 10-day period surface soil temperatures lay around 15°C. In the subsoil, the warming up period was delayed. There, with the end of the second 10-day period, temperatures dropped down to clearly subnormal values. By the end of the month, from 13 to 15°C were recorded at a 50-cm depth, from 12 to 15°C at a 100-cm depth. Ground water content diminished in the southern plains, widely in the first 10-day period and still locally in the second. Then the ground water level rose strongly everywhere in the third 10-day period, as it had already done before in the northern GDR. Under the turf they recorded at the end of the month at a depth down to 50 cm between 70 and 95% of usable field capacity in ground water in areas that had been heavily soaked. Elsewhere, values were between 40 and 70%. Showers in part were very intensive and then there were considerable runoff losses on ground level. Erosion damage, mud formation and temporary soaking resulted. Soil climatic conditions improved in the course of the first half of the month depending on rain supply. Composting and nutrient mobilization were held up, starting with the end of the second 10-day period, when subnormal ground temperatures were persistent.

The high air temperatures in the first half of the month greatly stimulated growth. Initially, to be sure, that was limited by moisture supplies, mainly for the cultures going through their main growing period. At the same time there was an acceleration in development and a rapid succession of the phenological phases. Starting with the end of the second 10-day period the low air temperatures (daytime averages mostly between 12 and 15°C) and the lack of sunshine then prevented a full utilization of the meanwhile very good moisture supplies. Most strongly disadvantaged were cultures that need a lot of heat, like corn, fruit vegetables and beets. These conditions were advantageous for forage growth, especially grasses, the filling in of potatoes, the gra formation for the winter crop, but also the growth of weeds. The cool nd humid weather once again delayed developments which became most conspicuous in the ripening processes. Heavy rains made the winter barley and winter rye turn over, but not too much because of the rather solid stalks. Hail caused local damage. Fungus pests had an easy time.

During the first 10-day period field work hardly suffered from disturbances due to the weather, but then came more and more interruptions because of the rain. The beet crop cultivation had been delayed anyhow (delayed cultivation, slow early growth), and that significantly diminished the time available for labor. Furthermore, the effect of mechanical anti-weeding measures was curtailed. For the forage harvest the high ground moisture content often led to vehicle tracks and required extra tractor power. Starting at mid-month drying conditions became very unfavorable that hardly permitted hay formation and considerably interfered with the preparation of ensilage (losses of nutrients, inadequate dry substance content). Average daily duration of relative air humidity below 70% dropped from 8 to 10 in the first half of the month to from 5 to 7 h in the second. Whereas first there had still been a great need for rain, this was reduced in the course of the second 10-day period, starting in the north. In the third 10-day period only small areas were left in the southern plains that needed extra water. Reservoir and damming areas had to be drained to ensure the trafficability and grazing capacity of the areas and prevent scar damage.

Meteorological Projections for Farming for August 1980

As the June weather was perfect for widespread potatoe rot extensive herbicide measures are of increased importance. In scheduling dates for that one should consider the possible extra growth and harvesting deadlines.

For the grain harvest, due to the introduction of the summer season, there is a one-hour shift for drying operations in the morning and watering the crops in the evening, which should be taken into account in drawing up working plans. Also recommended is recording the duration of rain periods which is more important after showers than the rain volume for the absorption of moisture. For example, when the rain lasts up to 1 h, the moisture gained is between 1.5 and 2.5%, when 2 or 4 h, between 3.0 and 4.0 or between 4.5 and 6.0% respectively.

Crops accustomed to much and easily accessible water will need extra water even in brief rain ..or periods.

CROP, WEATHER REPORT PUBLISHED FOR JULY 1980

East Berlin FELDWIRTSCHAFT in German Vol 21 No 9, Sep 80 p 432

[Article by Dr D. Krumbiegel, GDR Meteorological Service, Central Weather Bureau, Potsdam]

[Text] The Weather in July 1980

Subnormal averages in daily air temperatures lasted until the 23th, and subsequently the weather was somewhat too warm. There was a lot of rain, especially in the first two 10-day periods. Sunshine was considerably below normal.

The very cool weather of the third 10-day period of June lasted until the 6th, with from 2 to 4 K subnormal daily air averages. Between the 12th and 22nd it was from 3 to 5 K too cold most of the time. Daytime maxima up to the beginning of the third 10-day period mostly ranged between 16 and 22°C. Starting with the 24th, maxima generally came to from 20 to 25°C, on some days, up to 28°C. At night, ground air temperatures several times dropped to from 5 to 10°C. For the rest of the time the minima mostly stayed around 10 or between 10 and 15°C, at the end of the month, around 15°C. Only between the 23rd and the 27th did the daily duration of sunshine in the whole territory of the GDR amount to from 12 to 15 h. For the rest of the time, sunshine was very poor, still more so in the south than in the north. In circa 20 days less than 5 h in sunshine were recorded widespread.

Only between the 23rd and 27th the territory of the GDR remained absolutely rain-free. For the rest of the time, precipitation fell mainly in the form of showers, which brought regionally very uneven water supplies. Almost on all rain days, local or regional volumes recorded were between 5 and 20 mm. Especially high were the volumes in the first 5-day period (regionally from 15 to 35 mm), on the 21st (Gera Bezirk, Karl-Marx-Stadt Bezirk and Dresden Bezirk, 50 to 85 mm), and at the end of the month (locally 30 to 40 mm, Teterow, 75 mm). At selected stations, total rain periods between 75 and 105 h were recorded (Magdeburg 55 h, Dresden and Karl-Marx-Stadt 135 h). The daily averages of relative air humidity dropped somewhat below the 70% limit only during the brief period when the weather was fine and otherwise mainly ranged between 75 and 90%.

[illegible]

1. Monthly Mean Air Temperature and Deviation from the Norm

Schwerin	15.?°C	[illegible]	Erfurt	15.2°C	[illegible]
Neubrandenburg	14.8°C	[illegible]	Leipzig	16.?°C	-1.9K
Potsdam	16.3°C	-1.8K	Goerlitz	15.4°C	+2.1K

2. Mean Precipitation According to Bezirks

Rostock	89 mm = 125%	Halle	87 mm = 12?%
Schwerin	103 mm = 131%	Erfurt	79 mm = 10?%
Neubrandenburg	100 mm = 137%	Gera	108 mm = 135%
Potsdam	87 mm = 119%	Suhl	134 mm = 160%
Frankfurt	83 mm = 112%	Dresden	131 mm = 162%
Cottbus	111 mm = 148%	Leipzig	109 mm = 13?%
Magdeburg	75 mm = 110%	Karl-Marx-Stadt	162 mm = 167%

3. Evaporation Potential

Northern Bezirks 35...?? mm
Central Bezirks 39...65 mm
Southern Bezirks 45...60 mm

Soil, Crop and Labor

Up to the start of the third 10-day period, surface soil temperatures mostly ranged between 15 and 18°C. After mid-month, often values below 15°C were temporarily recorded. In the third 10-day period up to the 26th and 27th, the soil got much warmer, by from 4 to 7K in the north, from 6 to 9K in the south. Then values dropped to around 20°C by the end of the month. In the subsoil, no noteworthy temperature drop could first be found. Starting with the middle of the third 10-day period it warmed up. By the end of the month, 17 to 19°C were recorded at the 50 cm depth, and 15 to 18°C at the 100 cm depth. All the rain kept the ground very moist both in the subsoil and surface soil, between 70 and 90% of usable field capacity. Somewhat lower values were recorded at the loess areas of the Bezirks of Magdeburg, Halle and Erfurt. In areas where it had rained a great deal, ground water temporarily reached field capacity values. The conditions were mostly unfavorable to vegetation. Only in the third 10-day period, temperature conditions improved. So much [illegible] on the soil interfered with the air budget and led to crowding. And when in addition there were heavy rains, erosion and puddles occurred, and floods in low lying areas. The condition of the fields was such that, especially in the forage harvest, tracks remained and the [illegible] was damaged. One must also assume that deeper down in the soil, [illegible] were dislocated.

With so little sunshine and little heat, the ample ground water supplies still did not permit a full benefit. To be sure, there was massive growth, especially for varieties that do not demand much heat, but the assimilation and thus the concentration in nutrients were greatly diminished. The weather delayed ripening: A phenological delay of 5 to 10 days persisted. The advantages deriving therefrom for kernel formation in grain are not likely to make up for the disadvantages resulting from the delayed harvest. Weeds and fungus were heavy (mildew, blight, rot). Heavy downpours compacted the grain, especially on amply fertilized lots. Proliferation and partly double growth too occurred there. On overly wet lots, potatoes reacted to air shortages by turning yellow. The second corn, not yet having formed a proper climate for its firmness, almost stagnated in growth during the first two 10-day periods.

Due to the rain, there was much interference with field work. Drying conditions were extremely poor, practically preventing all hay production and even placing ensilage production in doubt (long waiting periods, losses in nutrients, growing in). For fighting potato rot, one had to spray fast (strong growth and rains). There was no need for irrigation. Reservoirs were drained. For the harvesting-threshing of winter barley there were only a few days in the third 10-day period when meteorological conditions were favorable. But even there, strong dew formation further cut down the working time. But for the summer catch crop cultivation, the conditions were very good.

Meteorological Projections for Farming in September 1980

Abiding by optimum seeding periods for winter crop remains crucial for its yields. As the grain harvest was delayed this year, the straw must quickly be gathered. For improving soil structure and fighting weeds, we recommend, quite generally, intensive stubble working. That would, at once, also have advantages for the seed bed quality, for preserving the subsoil's water reserves, and for reducing the traction requirements in the seed or fall furrow. Since there has been so much rot in the potato plots, extensive and timely herbicide measures are recommended. Since the weeds are so abundant, chemical and mechanical measures should be combined. We must expect large-tubered and very wet crops that can easily be damaged. Thus great caution is called for in digging, processing and storing the crop.

CSO: [illegible]

[illegible]

DIFFICULTIES, PROBLEMS OF NATIONAL ECONOMY EXAMINED

Budapest VALOSAG in Hungarian No 5, May 80 pp 13-21

[Article by Janos Kornai, scientific adviser, MTA Institute of Economic Sciences: "Efficiency and Socialist Morality--a Few Dilemmas of the Hungarian Economy"]

[Text] Two Different Value Systems

The 1968 economic management reform brought tangible results.[1] Production has dramatically increased in the first decade since the reform. There is total employment. Since labor resources have become depleted, the production increase reflects mainly an increase in efficiency.

Although it would be worthwhile to analyze in more detail the achievements of the reform, I would like now to deal instead with a few difficulties and problems of the Hungarian economy. The Hungarian economist is in a special position for he is able to observe a great--and historically unique--experiment. I feel it is our duty to report the experiences of this experiment--not only the spectacular achievements, which can be followed even in the daily press, but also the less apparent concerns.

One of the objectives of the reform was to make the Hungarian economy more efficient. I will list below a few necessary conditions for economic efficiency.[2] I am not aiming at completeness; undoubtedly, there are several other important conditions that are missing. Also, I am not willing to reduce the conditions of efficiency to a small number of final conditions, that is, to deal with the question in an axiomatic form. I know only five conditions which were often mentioned in the debates on the Hungarian reform.

1. There is a need for a system of material and moral incentives that encourages the economy's participants--both the leaders and the workers--to perform better.

2. Thorough calculations must be made which take both profits and expenses into account. Our limited resources must be used economically. Inefficient productive activity must be stopped.

3. We must adapt rapidly and flexibly to the existing situation and external circumstances.

4. We need the enterprise of those who make the decisions: we need their initiative and willingness to introduce reforms and to take risks.

5. Every administrator and every decisionmaker must be held personally responsible for his or her work.

The five conditions above do not have any characteristically "socialist" content. On the other hand, they cannot be considered "capitalist" either. They are the general principles of efficient management. The official economic views of the East European socialist countries have always--not only since the reforms, but earlier as well--identified themselves with these requirements as the necessary conditions for the development of the economy and increased work efficiency.

Let us turn to another group of values which we will call in summation: the ethical principles of socialist management. Again, I am not aiming at completeness. There is a whole line of principles which were not included in the list. Just as before, when we talked about efficiency, I do not seek to formulate axiomatically and to arrive at a few final ethical postulates. I will be satisfied to deal with four principles. They may even partially overlap one another. At any rate, their position in the foreground is justified by the fact that they play an important practical role in the economy. All four principles appeared as early as the beginning of the labor movement, and within the capitalist system, but were redefined later when socialist economy was established. My article refers exclusively to the definition that is accepted in Hungary today.

A. The well-known principle of socialist waging is: "to everyone according to his performance."[3] This includes, among other things, the other well-known principle of distribution: "equal wages for equal work." Although the latter was originally formulated to help women, ethnic minorities and other disadvantaged groups get equal wages, its definition has been expanded in the socialist economy. It is evident that distribution according to performance should go hand-in-hand with the equal waging of the same work.

B. The principle of solidarity. Socialism abolishes the cruelness of capitalist competition which weeds out the weaker. The weaker must not be punished for his weakness. On the contrary, he must be helped to rise.

C. The principle of security: every member of the society should feel secure. This principle is closely connected with principle B above. Some of its more important implications are: the individual or a smaller community can feel secure in the knowledge that the larger community will come to help him in case of trouble. Society guarantees total employment--not just at the present, but once and for all. The fear of unemployment is a thing of the past. This can be said not only of total employment, but also,

in a more general form, of every achievement. The sense of security is strengthened by the fact that a standard once reached will be guaranteed by society in the future as well.

D. General interest comes before partial interest--regardless of whether the latter concerns the individual or a smaller community. This principle includes the priority of long-range interests concerning many generations over short-range interests, benefiting only the present generation.

The view has been established among economists of socialist principles that there is no contradiction between the two value systems, namely, that of efficiency and socialist ethical values. Perhaps it was Oscar Lange, the great Polish economist, who had the most illustrative formulation of this thought in his classic study of the theory of socialism, written in the 1930's.[4] Lange demonstrates a decentralized market economy, after Walras' concept, which is efficient and at the same time fits nicely into a social system built on socialist principles.

Experience does not corroborate this traditional view. It seems that slashes cannot be avoided between the conditions of efficiency 1 to 5 on the one hand, and the ethical principles A to D of socialist management on the other. The numerous dilemmas of decision in a socialist economy are created precisely by slashes of these two different value systems.[5]

Let me make a personal note here. Although I am striving to be as objective as possible in the analysis of the Hungarian economy's problems, my subjective view will emerge nonetheless. I am, on the one hand, an economist. And my other work involves mathematical economy. No wonder if my thinking has been "spoiled" by principles such as "rationality," "efficiency," and theories on the favorable effects of the decentralized market. On the other hand, my thinking has been deeply influenced by socialist social and ethical ideals. Thus, I also experience the dilemmas which every economist must face in the given characteristics of the Hungarian economy.

We will examine three problem areas, namely, incentives connected to profits, the survival of the enterprise, and, finally, the growth of the enterprise. In these three areas, the conflicts between the two value systems--the efficiency requirements and the socialist ethical principles--are especially apparent.

Let me begin by saying that this study will not delve into causal analysis. It would be a mistake to believe that the intention to enforce the ethical principles will violate the efficiency requirements, or vice versa. The actions of institutions or of decisionmaking individuals will be somewhat influenced, of course, by ethical considerations. But the roots of society's regularities of fundamental economic activity go much deeper. The topic of this article is thus much more limited. The article does not come up with any explanatory theory, but only attempts to analyze the theoretical possibility of bringing the two different value systems into harmony with one another.

Incentive Connected with Profit

One of the most characteristic endeavors of the Hungarian reform was to boost material interest connected with enterprise profits. This would serve the implementation of all five conditions of efficiency, especially the first two. (As a reminder: condition no 1 is to develop the system of incentives, and no 2 is thorough calculation and a strict balancing of incomes and expenditures.)

According to experience, however, interest in profits clashes with ethical principle A according to which everyone should have a share of the material goods "according to his performance" and receive "equal wages for equal work."

The Hungarian enterprises introduced profitsharing. This alone is a violation of principle A. The total income of two workers whose performance and wages are the same may be different if one has a larger share in profits than the other. In addition, the Hungarian enterprises acquired more autonomy in determining wages. A more profitable enterprise can pay not only higher shares of profits, but also higher wages, than a less profitable one. Because of all this, the income of workers with identical performance may differ widely.

Let us look at an example. Enterprise G is more profitable than enterprise H. It is possible that this reflects a better performance of enterprise G's management and workers. There is a better work discipline, more attention is paid to the quality of the products, and there is more flexibility in adapting to the circumstances. These might be the reasons for the higher profits. On the other hand, it is possible that they cannot take the credit for the increase in profits. There may be various factors at play that are outside of their control. For example, enterprise G inherited a better machine inventory from the period before profit-sharing than the less lucky enterprise H. Or the producer prices of both enterprises' products are centrally fixed and it just happens that enterprise G's prices have a high profit margin, and enterprise H's prices have a low one. Or both are exporting, and world market prices had benefited enterprise G, but not enterprise H.

The enterprise's management and workers consider the new income ranges "unjust." It is not they who are responsible for a small profit, or no profit at all. So why should they be the ones to be punished? They thus try to put pressure on the high authorities to level off the differences in incomes. And the higher organs themselves often feel that it is not right to allow excessively extreme differences, because that would contradict the egalitarian traditions of the socialist movement and the accepted principle of "equal wages for equal work."

There are many ways for the tendency of levelling-off to manifest itself. There are, on the one hand, general measures which prescribe how the

enterprise's gross profits must be divided between central and local taxes and other payments, the enterprise's investment and welfare funds, and the funds for profit-sharing and wage increases. Led by various considerations--among others, the intention to level off incomes--they prescribe quite complex formulas. This makes it more difficult to gain an overview of the system of interest, and this in itself decreases the incentive effect. But this is not enough. There are frequent ad hoc interferences with the finances of the enterprises to cream off "excessive" profits and to compensate for losses arising from "objective difficulties." In the final analysis, almost two-thirds of the enterprises' gross profits was taken away and redistributed in past years.

The often unforeseeable and incalculable redistribution, going through a hundred different channels, makes interest in profits illusory from many aspects. In microeconomy, the enterprise with high profits is supposed to limit its expenditures by the so-called budget limit. But under the circumstances mentioned above, the enterprise budget limit "softens up," that is, it does not really limit enterprise decisions.[6] The budget may be exceeded without any serious consequences. If the enterprise has financial losses because of uncovered expenses, the state will, sooner or later, pay them.

If an enterprise is in a difficult situation--because of outside factors that are beyond its control, for instance--it can react in two ways. One is that it can try to cope with the difficulties. The effort may be unsuccessful and the enterprise may go under. And even if the effort were successful, it would require sacrifices and self-denial. As long as the problems are not solved and the losses are not eliminated, the incomes remain lower than those at more fortunate enterprises. This way's objective is to adapt to the situation as flexibly as possible. The other way is to seek help from the high authorities: to send deputations, to complain and "to cry." "Lobbying" begins: the enterprise tries to find benefactors in the political and social organizations and high state offices who would use their influence on the enterprise's behalf. They would also use their personal connections. The second way's objective is to get financial assistance: as much state subsidy, tax relief, and "soft" credit as possible, and as soon as possible.

As a consequence of the second way, the enterprise, which acquired through the reform a greater autonomy to make short-range plans, almost voluntarily accepts tutelage. By seeking help, it continues or even increases its dependence on financial organs, banks and price authorities--in other words, on those central institutions which have an effect on its financial situation.

I would mention here the effect of the tendency to level-off the incomes based on undertakings involving risk, which is condition no 4 of efficiency.

Reform--be it the introduction of a new product, technology or organization or the exploitation of a new market--entails risks. The unsuccessful are going to lose. It is worth the try, then, when success brings high profits.

In post-reform Hungary, the economic manager cannot lose, but he cannot win much either. There is no possibility for a "great advance." The conspicuously and exceptionally profitable enterprise will sooner or later be "tapped." The levelling-off of incomes more or less goes together with a levelling-off of performances as well.

These are, then, the first examples for the conflicts between conditions of efficiency and the ethical principles of socialist economy. The more the budget--and thus both the managers' and the workers' pay--reflects actual profits, the more it may be separated from wages principles that are based exclusively on individual performance and the more it becomes possible to "unjustly" differentiate between incomes. And, the other way around: the more consistently the principle of "equal wages for the equal work" is applied, the more the incentive effect of profit-interest will weaken.

The Survival of the Enterprise

The earlier topics are closely connected with the next topic of our analysis, namely, the survival of the enterprise. We have said in condition no 2 of efficiency that if the comparison of expenses with incomes indicates that a certain activity is inefficient, then that activity must be stopped. If an enterprise is much in the red for a long time, then it must be abolished in the interest of the economy as a whole, even if this means a big loss of prestige for the enterprise's management and a temporary lack of employment for its workers.

This requirement may contradict ethical principles B and C. The principle of solidarity means that the weaker community must not be allowed to fall. On the contrary, it must be helped so that it can continue with its activity and stand up. And the principle of security proclaims that no member of society should be afraid of falling and being set-back. He should be confident that his individual achievements--the possibility of uninterrupted work and guaranteed employment--will continue to be guaranteed for him in the future as well, especially when--and here is where this subject is relevant to the topic of the previous chapter--his problems are not caused by himself, but by external circumstances that were perhaps unrelated to him.

In the Hungarian economy, enterprises almost never went bankrupt--and ailing enterprises were never entirely liquidated--in the first decade that followed the reform. Not only the possibility of employment in general, but the actual job held previously, is guaranteed equally for everyone. After the world market price explosion, which caused tens of thousands of companies around the world to perish, not one single Hungarian enterprise went under. To use an extensively used term, the state treasury "shouldered" the losses. The "natural selection," resulting from economic competition, did not take place: the strong and the weak, the active and the passive, the initiator and the impotent, they all survived the storm.

There are many ways the state can assist enterprises that are in trouble. It gives special grants; in case of a product that has a fixed price, it allows a special price increase, it reduces the enterprise's taxes or tariffs, or the bank gives easier credit or allows the postponement of repayment, and so on.

There is no way to unequivocally evaluate the situation thus arising. Solidarity and security are in themselves a big asset in a man's life. The life of the enterprise--and its workers--becomes more relaxed, for the fear of life-and-death struggle has been eliminated. But this will in most cases induce leisurely and torpid behavior. If the survival of the enterprise is automatically guaranteed, then the management's individual responsibility will also be weakened--and the fourth condition of efficiency will be violated.

The guarantee of individual employment is a related problem and thus I will mention it here. The Hungarian economic system freed the workers from the fear of unemployment, which not only causes great losses for both society and the individual, but also humiliates human dignity and makes the worker cringe before employers. The abolition of unemployment is a historic achievement. We must face the fact, however, that guaranteed total employment--and its outgrowth, a chronic labor shortage--also has its dark side. People are not the same: there are conscientious and less conscientious, hard-working and lazy, thorough and superficial people. The fact that the labor market is a "sellers' market" puts both kinds of people in a favorable position. The chief of a shop or plant will think twice before firing a careless worker, because he might not find anyone to replace him. And if he does indeed fire him the fired person will not find this a punitive measure for he will in most cases easily find another job.

Both of these closely related phenomena--the guaranteed survival of the enterprise and the guarantee of individual employment or total employment--lead to very difficult and deep problems. Is a society capable of achieving high efficiency exclusively through positive financial and moral incentives and rewards for efficient work? Is a negative economic incentive--the effect of a fear of collapse and of individual financial and moral losses--indispensable? I myself am not sure what the answer is.

But this much seems to be sure, however. We are facing, here too, great dilemmas and conflicts between various value systems.

There is a contradiction between the requirements of efficiency, on the one hand, and the ethical principles of solidarity and security on the other.

The Growth of the Enterprise

But next topic is the growth of the enterprise and, in this connection, the allocation of investments. The manifestations of the clash between the various efficiency requirements and the ethical principles are perhaps even more complex here than in the two previous areas.

Let us begin with a hypothetical system in which investment decisions are totally decentralized. This system would, no doubt, have some advantages with regard to efficiency. Conditions 3, 4 and 5 would be implemented more and more: risk, initiative and readiness for reforms would increase. Individual responsibility for investment decisions would become more flexible.

However--putting the ethical aspect aside for the time being--total decentralization would be in conflict also with some of the conditions of efficiency, first of all with condition no 2 which refers to the calculations of profits and expenses--when these categories are broadly defined. We would be facing the well-known problem of the welfare economy, namely, that the totally decentralized market does not, in the absence of any state or social interference, reckon with the external effects of local decisions that are not reflected in the market prices, including both the external profits and external expenses. This consideration leads us to ethical principle E, i.e., to the priority of social interest. If every enterprise makes investment decisions exclusively on the basis of its own interests in profits, then the danger exists that actions, which have primarily an external effect, will be pushed to the background.

Seeing this dilemma, the 1968 Hungarian reform set the objective of sharing investment decisions between the upper and lower levels of management. The reform laid down a significant decentralization when compared with the pre-reform period, but left considerable power, nonetheless, in the hands of the central institutions. Thus, for instance, almost half of the national economy's total investment was allocated in 1976 on the basis of central decisions. A little over a half of that is considered "enterprise investment;" for it is the enterprise that announces the investment decision. But only half of the so-called enterprise investments are financed exclusively with the enterprise's own savings, in other words, about one-fourth of the total investments may be considered totally decentralized. For the other fourth, the enterprise must apply for state subsidy or long-term credit, that is, the central planning and financial organs, the bank and the enterprise will decide jointly.[7]

The new situation (the combination of centralization and decentralization) has many beneficial aspects. It makes it possible for the central organs to adequately balance the totally decentralized investments with centrally decided investments if the former's proportion is socially unfavorable. The allocation of the total investment may thus be adequately adapted to the central plans without making it necessary for the central office itself to divide all investment resources to the last penny.

The central office thus has the means by which it can guarantee the priority of society's interest over local and enterprise interests in case there is a conflict between them; it can serve the long-range interests of society (which are not always possible to express in terms of money) against the enterprise's short-range interests in profits. This combination of the power of decision makes it possible to use many different sources of

information to prepare individual concrete decisions. The enterprises supply the concrete and detailed information, and the higher authorities that take part in the decision supply the overall view of national economic relations and long-range plans.

The advantages are accompanied, however, by disadvantages. Since the majority of investments require central financial support or credit, decisions are preceded by lengthy bureaucratic processes. This diminishes the flexibility of adaptation. (Violation of the third condition of efficiency.)

The enterprises and lower-level authorities which have an interest in investments try to influence the higher organs. They try to present arguments, but they also use personal connections when they feel that this will promote an investment case initiated or supported by them. The economists and planners in the central organs are not impersonal representatives of the entire society's rationality; they are not philosophers of Plato's ideal state who embody a comprehensive wisdom of society. They are live people, living in the midst of society, connected by a thousand threads to their colleagues active in economic life. It is impossible to separate in their decisions the role of the strictly rational recommendations of economic calculations and personal intuitions that are subsequently "rationalized." Those who decide on investments in the higher organs should always pay special attention to the external effects of the actions that do not show up in the books of the enterprise concerned. However, this consideration is sometimes obscured by views reflecting the internal interests of the enterprise which recommends the investment action.

We must understand the sociology and sociopsychology of the decision process that precedes the investment in order to find an explanation of what happens if the investment is unsuccessful. It is simply impossible to determine who is responsible for the faulty decision. Since the decision was preceded by a multilevel, iterative informational and decision-preparing process, every organ and every person taking part in it is responsible. They are responsible--and yet they are not, for they can say that they did not want the investment this way, it was the negotiating partners who forced this compromise on them. In the final analysis, then, personal responsibility for investment decisions disappears. (Violation of the fifth condition of efficiency.)

Here we come to the explanation of the phenomenon mentioned earlier, namely, that the state gives a hand to the enterprise having serious losses in coming out of the trouble. It is not simply the "State" that helps but by virtue of using the state's money, all of those officials who--in the framework of the collective decision--took part themselves in the preparation of the action. Let us suppose that the losses were caused precisely by a faulty investment decision. Construction was delayed, the cost of buildings and machines were higher than expected, the new export product cannot be sold at the price hoped for, and so forth. Who pays for the bad deal? Everyone who took part in the preparation of the decision has an interest

on not letting the question of responsibility become critical. This in itself provides impetus to help the enterprise in trouble.

It must be added to the above that the situation in investment allocations is closely connected to the two problem areas discussed earlier. As I have mentioned, only a small proportion of the investments is implemented on the basis of self-financing or credit which is given by the bank exclusively on the basis of profitability. State subsidy or long-term credit may be given also to an enterprise which is in a bad financial situation. Thus the view has been established at the enterprise that its profitability is not closely connected with either its survival or even its growth. This is the main explanation for the phenomenon called the softening of the limits of enterprise budget. In the course of the investment action, the enterprise may, without any undue risk, overstep the financial resources at its disposal at the present or in the near future. The loss will, sooner or later, be covered by the state. This can, then, lead to irresponsible initiatives in investment actions and to squandering during implementation, both of which are detrimental to efficiency.

Let us summarize the above. On one side stands ethical principle D: social interest must have priority over partial interest. The implementation of this principle is not the only reason to limit the rights of the enterprise or local institution to decide on investment allocations, and social interest is represented by the extended authority of the central organs. However, the practical implementation of this principle clashes in many cases with the other side, namely, the conditions of efficiency. In addition to this, ethical principle D is not even implemented consistently: partial interest will prevail again and again, even when it is decisively contrary to society's common interest.

A Few Closing Remarks

We have outlined three problem areas that are connected with one another, namely, the questions of interest in profit and the survival and growth of the enterprise. We have seen how different conditions of efficiency and ethical principles can clash with one another. We wanted only to show the dilemmas which the Hungarian economy must face--not the solutions to these dilemmas. We especially did not want to do this so that the Hungarian experience would not be "advertised" as one that found a solution for eliminating all complex contradictions. Perhaps it is one of the most significant achievements of the past years' Hungarian practice that it does not want to create the illusion of completeness and settlement, but rather accepts the tasks of experimenting and pathfinding.

I do not wish to create the illusion either that I know the formulas to solve our problems. The "quack-economist" type is well-known. He is always ready to give advice and recommend a remedy for every economic illness. (Quite possibly, he recommends the same remedy for all illnesses...) Or another picture emerges, that of the "apostolic economist," with the

complete and detailed design of the ideal society, the realization of which he proclaims loudly and with self-confidence. I think I am far from these colleagues of mine. I belong to those who realize the limitedness of their science; we are still raising questions instead of giving answers. One or another comprehensive or more limited reform can only be recommended with caution. And even then, we must point out to those carrying out the reform that the change will entail both advantages and disadvantages, just like a medicine which has a healing power and, at the same time, an unwanted and sometimes extremely dangerous side effect.

There are no "clean" and perfectly "staunch" and "consistent" societies. Every real system is built on the practical compromise of contradictory principles and requirements. This is what characterizes the post-reform Hungarian situation as well. At best--and, fortunately, this is quite frequent in our country--the compromise is a "convex combination" of the benefits of the contradictory principles and requirements. At least in part, the beneficial effect of all principles that play a role in the given process will be apparent. At worst, however--and this is not infrequent either--there is no talk at all of "convexity." Two principles clash with one another where the total implementation of one to the exclusion of the other would entail both disadvantages and evident advantages. Their combination, however, accentuates the disadvantage of both and hides their advantages. Many times a kind of mixture of principles and requirements is created in which efficiency and ethics disappear simultaneously. Sometimes central intervention, as a repository of a decentralized market oriented toward efficiency and of socialist ethics, is a combination in which they mutually undermine each other's beneficial influence.

The reformers and the architects of economic institutions and mechanisms have a penchant for "perfectionism." In seeing the first weaknesses of the reform, they would like to reform the reform right away. For instance, more than 100 orders and statutory provisions have been created in the 11 years since 1968 to regulate enterprise profits and profit sharing. No matter how carefully thought out and smart some of them are, their effect is undermined precisely by their eternal improvement. The participants cannot really master the game if the rules of the game are constantly changed. Thus we reach a new dilemma here: the rigid institutional system, only partly suitable, stands in opposition to indecisiveness and the disadvantages of instability, caused by eternal improvement.

The traditions of economic science made us used to the view that everything can and must be "optimalized." It is thus understandable that the idea was born: an "optimal economic system," a set of the best "rules of the game," or the best regulatory mechanism must be designed. The person who strives to achieve this somehow thinks that he can visit a big supermarket where the various elements of the mechanism and the manifestations of the various beneficial attributes of the systems will be found on the shelves. On one shelf, there will be total employment as it has been realized in East Europe. On another, the high-level plant organization and discipline

as known in West Germany or Switzerland. The third shelf will display economic growth without recession; the fourth, price stability; the fifth, the fast adaptation of domestic production to the demands of the foreign market. The system designer has nothing else to do than to push the shopping cart in front of him, to collect these "optimal elements," then to go home and make an "optimal system" out of them.

This is, however, a naive pipedream. History does not maintain such a supermarket in which we can select what we want. Each real economic system makes up an organic whole. It may contain good and bad simultaneously, and in more or less set proportions. Anyone who wishes to take a stand in whatever system he would prefer can choose only from various prepackaged combination goods. There is no way to select from the various packages the elements we like and to leave there the ones we reject.

For me, it seems that it is impossible to create a closed and consistent socioeconomic normative theory which would implement without any contradiction a political and ethical value system and would, at the same time, guarantee management efficiency. It is impossible if it seeks to be realistic and wants to take into account the real nature of people, communities, organizations and social groups.

It is a more important and timelier task to study the existing societies and to explain the regularities of their operation. Our science must make it clear what compromises between the various normative principles the social forces create in the various social systems. We must strive to contribute to the goal of making the compromises' and contradictions' form of movement as sensible and beneficial as possible. This is a scientific activity which may yield social profits.

FOOTNOTES

This is the Hungarian text of the author's lecture in English, given in the Irish Economic and Social Research Institute of Dublin in honor of R.C. Geary, economist and statistician.

1. There is an extensive literature on the Hungarian reform. The following are of prime interest: Nyers (14), Friss (ed.)(5), Gado (ed.)(6), Gado (7) and Csikos-Nagy (3).

2. Economic science does not have an unequivocal definition of "efficiency." It is unnecessary here to get involved in the debate regarding the exact definition of this concept. It is sufficient if the reader clearly senses the association of ideas connected with the concept: efficient activity is the name of an activity which is done on the basis of useful results and the sacrifices made to achieve these results; an activity which makes a good use of the resources.

3. The classic definition of the principle was given by Marx (13) in his critique of the program of Gotha.

4. Vid. Lange, "On the Economic Theory of Socialism" (12).

5. The problems of harmony and contradictions between economic interests, productivity and the ethical requirements were discussed in numerous studies in the debates on the mechanism's reform, among others, the articles of Andras Hegedus (8), Tibor Huszar (9) and T. Ivan Berend (2).

6. On the softening of the budget limit and its effect on enterprise behavior, vid. the author's "Deficit" (11), to be published in the near future, and his article (10).

7. On the new spheres of authority in making decisions in investment allocations after the Hungarian reform, vid. Deak's study (4).

8. The problem area brought up in my lecture has a certain relationship with the questions of Arrow's famous "thesis of impossibility." Vid. Arrow (1).

   Two of Arrow's postulates define requirements of "rationality," and two other postulates define "political and ethical" requirements. The overlapping between Arrow's four postulates and the 5+4 requirements listed by me is, however, only partial. Arrow proves with perfect logic the impossibility of total reconciliation of his four postulates. I am attempting much less: I only illustrate with vivid examples the unavoidable conflicts between the two groups of values. According to my intuition, we could go further than that. A strict and axiomatic analysis of the contradiction, which I only mentioned, would also be possible.

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ESTABLISHMENT OF NEW FOREIGN TRADE ENTERPRISE DESCRIBED

Budapest MAGYAR HIREK in Hungarian 18 Jul 80 p 7

[Report by Istvan Matko: "The First Swallow: Why the Generalimpex Is Established--the Advantages of Competition"]

[Text] At a recent ministerial conference at the Ministry of Foreign Trade, a resolution was passed on the establishment of Generalimpex, a foreign trade enterprise.

This is actually an everyday news report: one of our big telecommunications factories is being separated from the foreign trade firm with which it worked for 20 years, doing so in order to sell its products with the aid of another concern. The background is full of suspense, however, and what is more, it contains a strange fact: Orion is going to be connected with a new foreign trade enterprise which was created from Universal Ltd--a sales enterprise--which will now function under the name of Generalimpex.

But before describing its establishment or the reasons for its creation, let us dwell on Orion's decision.

Orion's Views

"Why did Orion need to change its partner?" I asked Bela Band, director of trade.

"Earlier, we worked exclusively with Elektroimpex, that is, more precisely, we are still working with it today, because only a decision for the change was made. Our television sets and other appliances have been exported by Electroimpex for the last 20 years in the most traditional way, on a commission basis. This no longer meets present requirements, and we had to look for other ways to meet the demands of the foreign market more flexibly and more efficiently; in other words, to meet the demands created by the competition. We were glad to hear about the change in Universal Ltd. This was an opportunity to establish producer--foreign trade relations most suitable for the demands of the market, that is, to do everything jointly: market research, exploration and marketing, to make joint decisions on products and markets to be considered, and to have the producer and the foreign trade experts take care jointly of the foreign marketing of the Orion brand."

"This sounds very nice in such general terms. But what is the guarantee that all of this will be realized in this way?"

"To begin with, we sign a contract with Generalimpex--a so-called pool contract--in which we agree on our joint activity. It is in the interest of both parties to abide by the contract."

"Why don't you wish to export by yourself? This would seem to be simpler and more practical..."

"Only on the surface. Our enterprise is not ready for the establishment of an independent marketing department. Also, it would do no good to use our internal resources for this, to create a new organization when the conditions for it do not exist. Practicality and sensible business interests dictate cooperation with a foreign trade enterprise that works flexibly. First, we want to use Generalimpex to export our television sets, and we will see what the outcome will be. We have thoroughly examined the possibilities for independent exporting rights and, in considering the pros and cons, we decided to take this step."

Reckoning With Small and Medium-Sized Plants

The expectations of the industrial enterprise, and even more the motives for its decision, suggest many things. It suggests, among other things, what concrete and practical possibilities exist for updating methods of foreign trade which are hotly debated by producers and foreign traders. Let us now take a closer look at the enterprise which is openly viewed by Orion with great expectations.

"What, precisely will be the activity of Generalimpex?"

"Actually, it will include everything," says Laszlo Darvas, director, while he arranges on his desk the pile of orders and letters of interested parties recommending programs. "Look at this one, for example," he points at one, "in which the cooperative of Vecses, well-known for its pickled products, is asking us to export its sauerkraut. The other one wants to export apple sauce and would like us to find possible customers. This one is perhaps the most interesting: the municipal management enterprise of Gyor wants to sell its turf abroad."

"How are Orion's TV sets related to this? What will the profile of the enterprise actually be?"

"Its name also indicates that we trade everything. The objective was to create a lively small enterprise which, primarily through its exceptional flexibility, would help to find a customer for every Hungarian product that is trying to find its way abroad. I have been toying with the idea of establishing such an enterprise for 2 years because there is a great demand for it. The situation is ripe now: the small foreign trade firm, employing less than 100 people, was created from our sales enterprises."

"If I understand it right, Generalimpex will thus compete with several small and large foreign trade enterprises which have been around for a long time. Do you get enough orders?"

"I think so. The preliminary surveys also supported our expectations. We have to take care of many so-called "small deals" in which we are especially efficient. I think, with this we can even fill the gaps... Incidentally, I must note that we are not afraid of competition either. We believe that orders should be given to the foreign trade enterprise which offers the best deals and which can work less expensively and with greater profit."

"This work needs well-trained experts and adequate interest."

"The team is fresh, it was put together recently, and it will obviously expand. For, as it is formulated in our deed of foundation, we want to be the foreign trade enterprise primarily of small and medium-sized enterprises and cooperatives, and thus we must not grow to mammoth size either. As far as the conditions are concerned, the interest of business dealers and experts was determined in a new way, according to the demand of the work, i.e., incomes will depend on the business deals and on efficiency. It is possible to imagine that someone will get, according to his interest in results, 30 percent of his fixed basic wage as a bonus. But it is even more important for our enterprise to emphasize relations with its customers. The enterprise can be efficient only if our customers are integrated into the foreign trade organization; this is the way we mix the expertise of both trade and production. The joint work and this broad definition of cooperation will definitely help us do a little better professionally than would be possible in the traditional way."

On the Road to Revival

As is known, foreign trade has also been affected by the new regulatory system since January 1980, its system of financial conditions having been fundamentally changed. The first experiences are favorable. It is certain that the "tax collector" character of the foreign trade enterprises has been eliminated. However, the new regulations were not responsible alone for the "new winds"; several updating and developmental conceptions will be realized which are supposed to improve foreign trade. The portfolio's agenda includes the study of the enterprise proposals of possible exporting rights as well as updating the foreign trade organization. The new firm to be established is an interesting and new germination among these. It shows that the foreign trade organization is on the path of its own revival--as exemplified, for instance, by the fact that it gives special consideration to small and medium-sized enterprises.

It is also worth mentioning cautiously that, behold, foreign trade can accommodate modest competition--or at least a competitive situation. For this small enterprise sometimes invades the territory of even those enterprises which had a monopoly up to now. Hopefully, the new Generalimpex will not remain the only "first swallow" in the profession.

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ROLE, FUTURE OF AGROINDUSTRIAL ASSOCIATIONS WEIGHED

Budapest PARTELET in Hungarian No 8, 80, pp 30-35

[Article by Dr Gabor Soos, state secretary for Ministry of Agriculture and Food Industry: "The Role of Agroindustrial Associations"]

[Text] Since the development of the socialist large-farm system in agriculture, the producer cooperatives, state farms, food industry enterprises, and more recently forestry farms have been constantly striving to exploit the advantages of cooperation. In the course of this endeavor, the most varied forms developed, from the simple contractual system to economic associations of varying states of development.

In the middle of the 1970's a group of large farms in Hajdu megye initiated the development of an agroindustrial association on the basis of favorable results in domestic economic cooperation and the experiences of the socialist countries. Following a broad-scale analysis, the Political Committee shaped the basic principles for the organization and operation of agroindustrial associations, and then the government regulated in detail the organizational and managing order of operation.

The state decisions conceived as follows the goals of the new economic cooperation forms: "It is the goal of the agroindustrial association to coordinate more closely the economic activities and development plans of the participating state managing organizations and the agricultural producer cooperatives. With this they should contribute, to an extent exceeding the dimensions of their farms, to accelerating the development of production relations and to increasing the efficiency of management through a more comprehensive organization of production, processing and marketing. It is, moreover, the task of the association organization to promote an improvement in the living conditions of the producer cooperative members, employees and enterprise workers, their occupation, political and cultural development."

The agroindustrial associations represented a new form in the system of economic associations. Since we had not had experience with this form, it seemed reasonable to set up only several such associations in order to acquire our experience. Accordingly, the Council of Ministers set up the rules for licensing the development and the procedure of state supervision.

Up to now four agroindustrial associations have been formed. In 1976, the large farms of Hajdu megye which took the initiative were licensed to set up the Hajudusag Agroindustrial Association. Then in 1977, the Szigetkoz, Bekescaba and environs, and the Kalocsa environs agroindustrial associations were established. Forty-five producer cooperatives, 5 state farms, 12 processing or sales enterprises, and 3 associations joined the 4 agroindustrial associations. The area covered 260,000 agricultural hectares, with 46,000 workers.

Development of the Conditions

The operation of the agroindustrial associations extends back only 3 to 4 years. This period is characterized primarily by the search for and development of serviceable methods for organization and management, and thus--despite the results already attained--it is not possible to arrive at final deductions. It can be stated that political positions and state measures on the agroindustrial associations have turned out to be correct, there is no need to make basic changes, but on the basis of practical experience there is justification for further development of the management rules and the strengthening of material incentive.

The agroindustrial association operates as a legal person. Its highest leading organ is the council, whose members are the representatives of the participants. The managing organizations participating in the association keep their enterprise independence, and their legal entity.

The democratism of the leadership is being realized in increasingly broader scale. Association councils have been formed, and in basic questions--property contribution, development plans, the use of material means and funds, the balance, etc.--they are the decisionmakers. The working method of these councils is characterized by broad-scale discussions of the problems, and in making of decisions the realization of a simple majority on the basis of "one member, one vote."

The associations have developed their order of internal control and have set up the control committees. Experience shows that the control activities are well planned and suitable to the goal; their findings and recommendations guard the common property appropriately and help in the development of management.

The system of special committees for helping the work of the associations and giving a professional basis to the decisions has been successful. The members of these committees are the best experts from the member enterprises. They help establish the foundation of development plans with professional opinions and recommendations. They strengthen the common work and promote the development of a unified outlook.

The organization of the independent apparatus of agroindustrial associations, their working method and manpower have developed according to basic principles.

It is the task of the administration and its leader--the director--to prepare decisions, organize their realization, establish the objective conditions, and supervise the execution. The administrative bodies, consist of 9 to 25 persons, the number being appropriate to the task. The members are well trained in theory, and are experts in practical experience.

In the sense of the government's resolution, the agroindustrial association creates common property from the starting property provided by the participating organizations, from the transmitted funds, the amortization of common fixed assets, credits available for common developments, and state support. To pay its debts, it uses first of all its common property. In case of a deficit, the participating managing organizations are guarantors of the association's debts in proportion to their property contribution.

The agroindustrial associations have established their material bases appropriately. At all four associations, the starting property and the paid-in property contributions assured an adequate source to begin managing. The property contribution of the farms consists of their full activity, whereas the food industry and commercial enterprises make their contribution in proportion to the value of the goods they receive from the participating farms. In the past 3 years, the farms of the four associations have given almost 446 million forints as development contributions, almost 10 times as much as their 46 million forints in founding property. The food industry and commercial enterprises contributed 139 million forints in property, about five times their founding property of 29 million forints. On the basis of the experience, the further development of the contributions is justified in such a way that instead of the realtively rigid annual contributions, the development programs of the associations should be better adjusted to the material possibilities of the participating managing organizations.

In the framework of the associations following their formation, a broad-scale economic activity has developed. In comparison with other forms of economic association, their activities are more proliferating and embrace the entire production organization and managing area of the participating managing organs.

For the development of production and more favorable area distribution, they worked out a branch development program based on the use of propagation plants and technology, and worked on their realization in an organized way. The initial results of this process, which will last a number of years, are encouraging. In accordance with area features, at the Bekescsaba association the areas for oleaginous plants and corn were rearranged; in the cattle branch at the Szigetkoz association, dairy and meat production were divided by specialization on four farms each; the Hajdusag association located its sugar beet production immediately in the area of a newly built sugar mill; important specialization work was also carried out in the vegetable production and livestock breeding branches.

Economic Activity

The associations regularly analyze by branches the development of natural indexes and costs of production, the factors influencing these, and the

causes for the differences. They give help to their farms, which have the same resources, but varying results, in developing an efficient operational and leadership organization. They follow with constant attention the financial situation of the farms. the development of the managing conditions, prepare analyses based thereon, and on the basis of the evaluation made at council sessions they accept proposals for the improvement of management.

In recent years the agroindustrial associations have developed manifold, common services. Nine to 15 kinds of services are available, performed by various associations, to assist in the work of the member farms. Accelerated promotion in the preparation of investments is served by the establishment of planning divisions, which meet the planning requirements of the associations and the farms, and on the basis of experience thus far they do so very successfully. To implement investments more rapidly, they have established new construction industry capacities at the Szigetkoz association, and they have regrouped and coordinated the construction industry divisions at the Hajdusag association. Each association is developing a common agrochemical center and working to establish a standardized motor pool and improve it by specialization for combined parts supply. They have worked out common fodder management programs. Despite the results achieved in developing a common service activity, much care must be devoted to this area in the future.

The common planning, production organization and service activities have contributed significantly to an increase in the production of the farms participating in the associations, and to a reduction in existing differences in yields. On the average for the four associations between 1976 and 1979 the production value of total operations--calculated at current prices--increased by 33 percent, which exceeds by 5 percent the average growth rate of state farms for the same period. Average production on large farms in the association in the past year exceeded the national average for wheat by 780 kilograms, corn by 1,550 kilograms, and sugar beet by 5,240 kilograms. Differences among the member farms declined, primarily as a result of more rational fertilizer management, the use of better stocks, and more efficient technology. In poultry breeding, laying hens more than doubled, sheep stocks increased by 110 percent, and milk production per cow grew from 2,458 to 3,839 liters.

The four agroindustrial associations have devoted a great deal of attention to the realization of common investments. Up to now, 21 different kinds of investments have been finished with a total value of 800 million forints. As a result the four poultry breeding sites are producing annually 7,000 tons of broiler chickens, and the three potato storage bins assure storage and handling for 27,000 tons of potatoes. A new poultry incubator is operating as well as a sheep and cattle pen, a vegetable storage facility, a site for drying paprika, a sowing seed dresser, and so forth. Four other important investments are under implementation: livestock breeding and industrial facilities, and agrochemical sites. It has been our favorable experience that all investments are realized more rapidly than average, in an organized way, and with good quality results. The natural production indexes are good,

and cost development is also satisfactory. Processing industries participating in the associations receive from the common production and from their own immediate environment raw materials in large quantity and of uniformly good quality. The significant reduction in transportation costs and the quality improvement extend economic advantages within the association both to agriculture and the processing industry.

As a result of the operation of the associations, the vertical relations of agriculture and the food industry have improved. According to experience, this relation develops most vigorously in those associations or branches where the large farms of the associations supply the food industry plants in greater part or at least to a significant degree with raw materials. From this point of view the relationship may be judged good of the Kalocsa Seasoning Paprika and Canning Industry Enterprise, the Debrecen Poultry Dressing Enterprise, the Hajdusag Sugar Factory, the Bekescsaba Canning Factory and the refrigeration unit, and the Bekescsaba and Gyor Zoldert Enterprise.

In addition to the production relations, the development of personal relations between the agricultural and industrial operations participating in the association is worthy of note. The leaders and specialists of the member units have come to know one another's work and problems even in this short period of time. A higher level of common thinking is in a state of development and growing constantly stronger, something which has a favorable influence everywhere.

Party Guidance and Political Work

The area guidance of agroindustrial associations belongs to the megye party committees. With the organization of the agroindustrial associations, and during their operation, these party committees have given complex assistance to the practical realization of the established guidelines. Their forums have discussed the work experiences of the association belonging to their sphere of authority and have given useful guidance to the solution of further tasks.

Within a short time the megye party committees established a council of party secretaries in all the associations. To unite them, they entrusted one of the working members of the megye party committee. The consultative committee, including all the party secretaries of the member organizations, receives information from time to time on the upcoming association tasks, the situation of the body and the specialized leadership, the more important subjects to be discussed, plan coordination and development ideas, and on their social and political effects.

Experience thus far shows that the council of party secretaries is a body which assists, gives opinions and promotes the realization of resolutions in their economic units and which orients the basic institutions on an up-to-date basis. Thus, it appropriately shapes the views of the party members and

mobilizes them for the tasks. They hold regular meetings, in general every half year. According to practice as it has developed, they put the more important problems on the agenda: The annual and the five-year plans, the common investments, the current production results, the final annual summaries, the effect on the living and working conditions of the members and the employees, and the social influences of the new cooperation form. With their observations and proposals they are positively helpful in the successful solution of the tasks of the agroindustrial associations.

At the initiative of the council of party secretaries, a Council of KISZ [Hungarian Communist Youth League] Secretaries was established in each of the associations. This significantly helps in forming the view of the young people, and their love for their trade, and it also strengthens the youth movement. At the praiseworthy initiative of the members from the Hajdusag, the HAGE [Agroindustrial Association of the Hajdusag] sport days were arranged in 1978; and at the same place in the summer of 1979, agroindustrial youth days were held at the initiative of the KISZ Central Committee. On this occasion they arranged lectures with discussions, exchanges of experience, and plant visits. This summer they are planning a similar program at Bekescsaba.

Semiannually, the Ministry of Agriculture and Food Industry holds a national conference of leaders of the agroindustrial associations. The megye party leaders and council leaders participate and they give appropriate orientation to the council of party secretaries and to the youth on the situation of the associations, broad-scale information on their common tasks for the formation of a common outlook and action.

Consistent party guidance and manifold political work will be indispensable in the future as well in order for the role of the agroindustrial associations to be realized adequately.

The Future Tasks

Agroindustrial associations--which do not enjoy the benefit of supports different from those in general--changed the production structure in a favorable direction within a relatively short time. Work distribution among the participating operations is developing appropriately, the production level is more even, and they were able to realize common investments well serving management development. All this shows that the basic concept of the agroindustrial association has proved successful, it has worthily helped in given places in concentrating intellectual and material resources, developing production, and making management more efficient. At the same time, it can be stated that the associations still do not adequately exploit their ecological features; they still do not coordinate in a planned way the development programs of the member enterprises with common activities; and there are still tasks regarding the procedure of property contributions, and the organization of vertical relations.

On this basis the Political Committee and the Council of Ministers, in recognition of the results, made the evaluation that the experiences thus far are still insufficient for final judgment of the economic association form, and do not as yet give an adequate basis for the organization of newer associations.

The major tasks in the development of agroindustrial associations may be summarized as follows:

--Even better exploitation of production conditions, natural features and material means;

--a more balanced development of the member farms and enterprises, development of a more efficient management;

--the working out and circulation of new, more economic and less material- and energy-intensive, less expensive technologies;

--rapid conclusion of common investments and putting these into operation;

--strengthening of the vertical relations among the raw-material producing and processing or marketing member enterprises;

--more effective use of intellectual and material resources and their concentration on the most important tasks serving development.

On the basis of experience there is also reason for examining certain provisions of the basic documents. These include membership relations, and resignation and acceptance of new members. There is also reason to analyze whether the area of operation by agroindustrial associations does not require a minor amplification from the viewpoint of strengthening their regional character.

We wish to inform public opinion more factually and broadly than before regarding the goals, results and problems of the associations.

Exploiting Advantages of Economic Associations

In addition to further developing the activities of the agroindustrial associations, it is justified for the agricultural, forestry and food industry operations to exploit more intensively in the future the possibilities latent in the various forms of economic associations. A basis for this is given by the fact that variegated forms of economic cooperation have developed among the operations, and in recent times we have acquired manifold experiences.

The most general of enterprise relations is the contractual system based on equal rights and mutual interest. To develop this further it is most important that contractual discipline be strengthened, as well as partnership relations enjoying mutual advantages, and the sharing of risks.

The system of cooperation between economic associations and the farms has been strengthened by the production systems which have developed on a broad scale over the past 10 years and have become the carriers for organization and circulation of industrial-type production in agriculture. At present, 73 production systems are operating, and about 90 percent of the farms are members of one of these systems. The production systems bring the biological, technological and technical-scientific factors of production into the framework of plant and work organization, and make production more and more economic.

The most differentiated forms of cooperation for production and service have developed among the farms in the framework of associations. Of the 800 associations operating in the whole area of the economy, approximately 700 represent the economic cooperation of agricultural, food industrial and forestry operations. The economic associations concern themselves with highly varied tasks and perform activities which an individual farm would find it difficult to organize by itself. Therefore, in addition to the farm-enterprise magnitudes that have developed, the managing organizations --realizing the principle of voluntarism and mutual interest--have used, in increasingly broader scale, the advantages latent in the various kinds of association. The economic association should not harm the independence of the cooperating enterprises, and democratism should be realized in leaders and in decisions.

All these cooperation forms and associations are important managing forms of our agrarian economy. Their purposeful organization and efficient operation helps, to a great extent, the successful realization of our economic tasks, and the carrying out of the party's agrarian policy.

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PRIVATE PLOTS, FARMS NEED AID DESPITE ADDED BURDEN

Budapest PARTELET in Hungarian No 8, 80, pp 36-40

[Article by Gyula Poden: "Tasks in Development of Private Plots and Auxiliary Farms."]

[Text] A party and government resolution was passed in 1976 providing for the promotion and organization of this work. The Secretariat of the Central Committee recently reviewed the implementation of this resolution. On the basis of overall experiences it could establish that production inclination grew on private plots and auxiliary farms in response to manifold measures, the improving level of material and technical supply, and appropriate economic conditions.

Production on private plots and household farms in recent years has increased in accordance with the goals of the Fifth Five-Year Plan. The gross production value of this sector last year--at unchanged prices--was 61 billion forints, that is, 11 percent over that in 1976. As a consequence, the sector's share in gross agricultural production hardly changed. While the number of producers declined significantly, their production became at the same time more specialized, and particularly the number of those equipped for commodity production increased among the young.

Livestock breeding continues to be of definitive importance in their activity, making up as it does 63 percent of the total production of auxiliary farms. Within this, slaughter pig production is the most important: more than 50 percent of the pig stocks are in this sector, and in addition to self-supply, about one-half of the marketed fattening pigs come from this sector. Small farmers produce one-fifth of the slaughter cattle, one-third of the dressing poultry and rabbit meat, and the entire output of honey. On the capitalist markets these are marketable at good prices. Annually they bring more than $50 million in receipts to Hungary. There are also some problems in addition to the good results. We have not succeeded in permanently reducing the decline in cow stocks, and over a 7-year period about 100,000 small producers gave up cattle breeding. In some cases, fodder supply problems have also played a role.

The role of small producers in arable-land crop production has declined, but in the production of several special crops like poppyseed, dry beans, and potatoes they continue to be important. In response to demands, vegetable production has also developed dynamically. More than 1 million families are engaged in their production. It is particularly noteworthy that these farms have increased foil-covered production from 13 million square meters in 1976 to 40 million square-meters--which is 70 percent of the total foil-covered area.

In grape and fruit production the development has not been even. Grape planting areas declined by 25 percent, whereas garden and fruit areas increased one and one-half times. Unfavorable weather, the difficulties in obtaining propagation plants (sweet and sour cherries, nuts, etc.) are limiting production. Despite this, the role of the small producer continues to be of definitive importance in the production of plum, raspberry, strawberry, and peach.

The Condition System of Production

Small-farm production is based on family labor, and outside manpower is used only to a negligible extent. Its production continues to be characterized by fragmentary manpower which does not hinder the work of large farms, and does not develop at their cost. The number of active agricultural earners among small producers is declining, while at the same time the ratio of non-agricultural earners and pensioners is increasing. The judgment of this activity is very important both from the viewpoint of their further development and assistance.

From year to year, the biological base of private plots and auxiliary farms--sowing seeds, propagation materials, breeding animals and fattening primary materials--is available at a rising level. Sowing seed supplies for vegetable production are constantly improving. The feed-grain fodder supply is also constantly expanding. Fodder stores are operating at all settlements in the country. Fertilizer and herbicide consumption has increased. In the past year, there were 130,000 tons of fertilizer to meet demand. Herbicide purchases increased by 30 percent within 4 years. However, we were unable to meet demand for several fungus and insecticidal agents of capitalist origin. By far the greatest share of the chemicals in shortage can be replaced by domestically manufactured products or by imports from socialist countries.

Small machinery, as compared with the goods base in 1976, doubled, and the value exceeded 1 billion forints. The shortage in the quantity of agricultural implements has been ended, but the purchase of special or less expansive domestic tools is still difficult. The import products, on the other hand, are more expensive than the comparable domestic goods. In most of the traditional hand-driven small machinery and in livestock breeding equipment, the supply is adjusting to demand. An adequate supply of milking machines for small household farms became available only at the end of last year.

The increasing demand for small, internal combustion garden machinery has been met only partly because of the slow development of domestic manufacture and despite considerable capitalist imports--$4.6 million in 1979. The start of broader scale production of small tractors in domestic cooperation may bring a substantial improvement in the situation. There is a great need for this because, with the younger people who have joined in production and the urban population there is a strong effort at easing labor and modernizing agricultural small farming. It is only with such satisfaction of their demands that we can assure they will be permanently engaged in private-plot activity.

A continuing problem is the satisfaction of delivery demands, although the value of such services on the large farms and the afeszes [general consumer and marketing cooperatives] increased by 30 percent as compared with 1976. A general problem is that we have too few small-capacity delivery vehicles. The solution is primarily the task of the large farms that organize small production, but the situation could also be eased by privately licensed acquisitions of tractors, trailers and small trucks.

The development achieved in the past 4 years has been contributed to by the incentive effect of the economic regulatory system, as well as by the many-sided economic-political and production organizational measures. Owners of private plots and auxiliary farms may buy fertilizers and herbicides at the same--state subsidized--price that the large farms pay. For certain materials they receive preferential support: foil and foil frames, and for certain activities which are particularly important from the economic point of view, like cattle breeding and grape and other fruit production.

The tax system has become unified and easily reviewable, and this has been favorably received by the small producers. The number who pay taxes on receipts over 150,000 forints has increased fourfold within 3 years, but even so last year this meant only 1,638 persons, or 0.1 percent of the taxpayers.

In the development of production, loans play an important role. In the past 4 years a total of 526,000 small producers have taken out production loans of 4.8 billion forints from the National Savings Bank, or from the savings cooperatives. The extent of the average loan rose from 8,000 forints in 1976 to over 10,000 forints in the past year.

It is necessary for the small producers also to be aware of the economy's situation and of the change in energy prices. In response to the economic regulators in effect since 1 January 1980, certain cost elements will increase, and it is expected that these will stimulate the producers to economy. It serves the maintenance of material incentive and the inclination to produce that the rise in buying prices, all in all, counter the increase in costs. It is true that this does not mean an automatic counterbalancing in every area: where the cost increase is greater than average because of the character of the production--heated production under foil--or the

specific results are less, a transformation is necessary in such a case of the "product structure" to a more economic management. This must be promoted with circulation of information and expert advice for if the small producers do not adjust flexibly to the altered circumstances the profitability of their work will decline and it may happen that many will abandon production. In this area we must observe with particular attention, pig and poultry breeding and vegetable production under the cover of foil, which is high in energy demand.

It is a nationwide problem that frequently the large farms do not recover their costs relating to private-plot production. They generally reckon the materials and services as overhead. In addition, their preoccupation with the private-plot operation branches requires a great deal of time and energy, which is also a burden on the managers. This problem cannot be neglected because in 1978 the value of produce and animals marketed through common farms exceeded 15 billion forints. Now, because of their more difficult material situation, the large farms are trying to reduce their costs and increase their receipts. For this reason profitability may decrease for the small producers, which may cause stresses in production.

In recent years supplementary income has operated as an important incentive and driving force, and there were many who wanted to compensate in this area for the effect of the 1979-1980 consumer price change. Since the owners of private plots and auxiliary farms are doing this increasingly difficult and specialized production work in order to increase their income, their market or income sensitivity has grown. In this situation the strengthening of the organizational level based on mutual interests is of great importance.

With Greater Organization

The organization of production has constantly improved in recent years, and small producers find their security in relation with the large state farms and the afeszes. Nowadays the number of private plots and auxiliary farms organized by large farms is near a half million. For the independent organization of small production, the tsz's [agricultural producer cooperatives] established independent private-plot branches in which 2,900 specialists are working, including 1,560 who were released to help in this activity. The private-plot branch works on the basis of a separate accounting, organizes the activities of the small producers, gives advice, and cooperates in assuring the conditions of production, in marketing, etc.

In the past 4 years the afeszes increased the number of specialized groups to nearly 2,600, the manpower in which exceeds 200,000. Aside from a few exceptions, the specialized groups operate in the framework of the afeszes. The great majority of them are occupied with rabbit, pigeon, and pig breeding, with vegetable production and bee-keeping. Parallel with the rise in production, the afeszes strengthened their guiding and buying apparatuses

and increased the number of engineers and technicians. They have advanced a great deal in the material-technical supply of production, in broadening the specialized store network and in expanding the giving of expert advice.

The forms of relationship are wide in scope; from multiyear contracts through fattening of pigs on a contract basis and the joint buying of basic materials to the operation of specialized groups, every different kind of version can be found. But despite the development, producer confidence and security is not complete. The reason is, on one hand, that the buying enterprises have not as yet joined adequately in this integration and, on the other hand, that there are disputes and tensions because of the marketing cost distribution and bureaucratic organization. The state of organization is the highest in pork production and buying. Ninety-eight percent of the fattened pigs are bought by designated organizations. The remaining buying and food industry enterprises are still only at the initial step.

For the improvement of technical supplies, the setting up of about 70 machinery loan establishments proved to be a correct initiative. Also favorable is the fact that 380 large farms, as well as a number of afeszes, have begun the repair of small machinery and equipment.

The coordinated activity of the councils--to create harmony among the farms, afeszes and buying enterprises--was more lively at the beginning phase, and the effects of their measures were better felt in the broadening of production, establishing conditions, and handling nonproducer cooperative members with equal judgment. Their attention has dropped in recent times, they do not follow now with such critical eyes the whole process of production, and thus they do not notice the lesser or greater deficiencies and distortions that may appear from time to time.

The social organs--the Patriotic People's Front and the interest representational organs--also help in the development of a correct outlook. They cooperate in the organization of the work and in recognizing good results: every year they decorate about 1,000 persons, or award them plaques in recognition of their outstanding achievements.

Better Exploitation of Resources

In this year when the Fifth Five-Year Plan is being concluded and the Sixth Five-Year Plan is being prepared, a realistic accounting is taking place in every area to enable the targets for the future to be exactly defined. In designating agricultural tasks, a great deal of attention must also be devoted to the development of private-plot and auxiliary farm production development. The goal in this sector, too, is the increasing of production at a higher level. To this end, it is necessary to improve the guiding and organizing work, and assure the condition system for this purpose. This is no small task and requires the more consistent realization of the 1976 party and government resolution. For this reason, the party organs should continue to pay attention to see that the work starts or continues with an upswing

at every level and in every area. Existing errors should be corrected, and distortions eliminated. They should press forward with development production by taking into account the new requirements.

The work is made more difficult by the fact that modifications from time to time in the regulator system affect the activities of this sector as well. Here too we must press forward with more economic, efficient management. On small farms also the reserves of profitable management are to be found in the better use of local resources and possibilities.

While the party organizations are working on discovering the reserves, they must not forget to see to it that the producer meets his calculation, but not at the cost of the integrating operation. Everyone should realize a fair income because otherwise there will be damage to the individual, the large operation, and the national economy. Therefore, they should observe with care the entire process of production and buying so that they will be able to eliminate the tensions with speed and timeliness.

We need an economic regulator system which will stimulate private-plot production and establish incentive for the organizers as well. It is no less important that the material-technical conditions of production should continue to improve. In addition to the latter, it is necessary to devote care to intensifying the certainty of buying, particularly marketing. In the recent period there have been many weaknesses in this field in addition to the fine results. The work of flexible, well-functioning organizations helps small production, while disorganization sets it back.

It is necessary to develop an organization form which will assure a better state of organization. This means the small producers should receive timely information on the goals and production demands of the economy, and the organizers of production should be informed of the intentions of the small producers. We must take this into account also in preparing for the Sixth Five-Year Plan, but we cannot neglect it either in preparing the annual plans. We must not ruin respect for stable, multiyear contracts. In annual contracts, however, it is advisable to organize the producers flexibly and in accordance with demands, for example, in vegetable production in making contracts for vegetables that can be substituted for one another.

It is an indispensable condition that appropriate harmony should exist also among the integrators of production. In this the councils also have a role in addition to the large farms, and the buying and marketing organizations. As their part in guiding agriculture it is the task of the community councils to observe small production carefully, promote it, and supervise the observance of orders.

The results achieved in private-plot and auxiliary farm production are important, but it must be developed further in the effort for the development of fully organized small production. It is also necessary that more and more people understand this, that they interpret the tasks uniformly, and that they help in private-plot production.

in agitation and propaganda work, the party organizations approach these problems from the aspect of helping and developing production. They should call attention to the fact that in addition to modern procedures, means and varieties, the traditional and inexpensive solutions should not be forgotten because in many instances their profitability is greater. This is in the collective interest of not only the small producers, but also the economy, because nowadays the utilization of byproducts and increased economy is a primary economic political task.

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WHEAT GRADING SYSTEM, QUALITY OF HIGH-YIELD FOREIGN WHEAT EXPLAINED

Budapest MAGYAR NEMZET in Hungarian 10 Aug 80 p 7

[Report by Sandor Illes: "What Kind of Flour Is Used for This Year's Bread"]

[Text] The harvest is coming to an end; there is hardly any cereal still standing in Baranya, Csongrad and Bacs-Kiskun megyes, and work is progressing well in Pest, Bekes and Szolnok megyes; Tolna Megye reported that 80 percent of the crop had been harvested by the end of the week; Zala Megye also made up the arrears and harvesting is being done at full capacity in the other megyes as well. Harvesting in Nograd Megye is being made easier by the fact that the crop was not lodged.

The size of the crop cannot yet be estimated but experience shows that this was a good year as far as quantity is concerned. The ears are full, there are many grains. But what kind are these grains?

It is well-known that even wheat is being purchased this year according to quality. More is paid for better-quality wheat which has a higher gluten content. The better wheat will go to the mills and that is what the bread will be made from. Thus the bread will also be better.

Three Categories

In the old times, Hungarian wheat was famous for its quality, especially that which was grown alongside the Risza and at Bankut, the type improved by Rudolf Fleischmann, but even the later species. Older people still remember the articles in the papers which reported that the bakers of London put a sign in their windows that their pastry was made from Hungarian flour.

Today, however--let us face it--we often complain about the bad-quality, gluey bread. Did the bakers forget how to bake bread? It is not always they who are at fault. Often the quality of the flour is bad. Where is the legendary hard wheat of Bankut now?

Quality is worse, quantity is larger--this is how the present situation can be described. New species of wheat were domesticated in recent years. These species yield large crops and are suitable for combine harvesting. Only

they are not as suitable for bread. This is why it was necessary to take delivery of the crops according to quality in order to give better wheat to the mills.

We talked about this with Dr Jozsef Bagi, vice director general of the Grain Trust and nationally renowned expert in this area. He informs us that good-quality species of wheat were still being grown in Hungary in the 1950's. Essentially only two species were grown in those years.

"Undoubtedly, the inner quality of the wheats grown then was better than that of the present species," he says. "Generally, it met the quality requirements. For this reason, we usually examined the storage and milling characteristics of the wheat instead. Less attention was paid to the inner quality. At present we have larger crops and the quality of wheat has deteriorated accordingly."

About 20 species of wheat are grown on the farms in Hungary today. There are three categories of quality: Improving wheat, miller's wheat and fodder wheat. The improving wheat is eating wheat, having the highest gluten content; the second category is standard wheat and the third is the poorest, used only for animal feed.

Gluten That Is Good

"The new standard differentiates between these three kinds of wheat," continues the vice director general. "The improving wheat's raw gluten content is 35 percent. These wheats yield smaller crops. This category includes five species of wheat, some of which are new Hungarian species such as the MV-4 and MV-5, both from Martonvasar.

"The mass wheats yield 50-60 quintals but their gluten content is lower. Wheat with an ideal gluten content, such as the GK Tiszataj, does not yield more than 45-46 quintals. We have also domesticated some Yugoslav wheat, such as the Pertizanka or the Rana. But several areas have problems in growing these.

"Categories AI and AII are the most suitable for the baking industry, having the highest gluten content. Miller's wheat does not have as much gluten, it belongs to categories BI and BII. Quality wheat is used to improve these. That is what improving wheat is. With regard to the third category, the mass crop, it would be suitable only for baking flat cakes. Such is the Libelulla and many other Italian species. They yield a large crop but their quality is low."

The preparation of the new delivery system was preceded by a 2 year series of experiments: In 1978 and 1979 a thorough comparative examination was conducted at numerous delivery stations, and the best-quality species were determined on the basis of the experiments.

There are, of course, local characteristics as well which must be considered in the future. It happened that the gluten content of the high-quality GK Tiszataj was over 35 percent in the country's good wheat-growing regions but reached only 32 percent in Zalaegerszeg and the surrounding area. The gluten content of this specie varied between 21 and 43 percent. Of course, this percentage is affected by the weather, the time of harvesting and many other external factors.

One Hundred-Two Laboratories

"We are purchasing wheat this year at 2,000 delivery stations," continues Dr Bagi, vice director general. "Wheat quality control is done in 102 laboratories."

"What method do they use?"

"At delivery, the basis is generally the weight per hektoliter, this is the old measure. We also use an instrument called the Valoriograph. The 102 laboratories mentioned above use a mill and a bakery jointly. The wheat is milled with small stones, the flour is then kneaded, with salt, yeast and all other materials, and then leavened. The small baking oven then bakes the dough. This way we can also taste the quality of the bread. Is the flour good or unsuitable for baking bread?"

"What is the difference in the delivery price?"

"This year's official delivery price is 280 forints for each quintal of fodder wheat, 310 forints for miller's wheat and 325 forints for eating and improving wheat."

"And what will be the quality of this year's wheat? Can the bakeries make good bread from it?"

"The quality of this year's wheat varies. For the time being, the overall quality cannot yet be determined; this can be done only when all crops will be delivered. However, harvesting will last another 2 weeks or so. The experts say that the quality of this year's crop, because of the bad weather, is expected to be lower than required. On the other hand, there will be a larger crop of high-quality improving wheat. By mixing this with miller's wheat, it will become possible to make the flour used for baking bread more stable."

"Which means that the quality of the bread will improve?"

"Yes, it will, but to achieve this it is necessary to mix the flour and to introduce and employ processes that improve its quality. The conditions for this do exist and thus we can hope that the bakeries will be able to make better-tasting bread from this year's crop..."

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DEPUTY MINISTER INTERVIEWED ON CLOTHING INDUSTRY PLANS

Budapest MAGYAR HIRLAP in Hungarian 17 Aug 80 p 5

[Interview with Imre Szabo, deputy minister of light industry, by Gyongyi Cseszak]

[Text] Light industry, including the textile clothing industry, has had many problems in recent years. The world market changes, the effects of the price explosion, over a broad area, have influenced profits and sales possibilities unfavorably. Primarily, structural change and modernization may help in these problems--and quite a number of programs have been prepared to this end.

Gyongyi Cseszak discussed with Imre Szabo, the deputy minister of light industry, how the textile clothing industry is preparing for the Sixth Five-Year Plan.

Imre Szabo was born in 1930 in Vasvar. He completed a technical university education. He has had various positions in the textile industry: in 1963 he became deputy department chief in the Ministry of Light Industry and subsequently department chief; in 1977 he was appointed deputy minister. His area of work is the textile clothing industry, as well as technical development and industrial policy.

[Question] It is our impression that within light industry it was the textile industry that made the best recovery from the shock caused by the slump. Despite this, many open problems are still waiting for solutions. What are those areas and enterprises where the Sixth Five-Year Plan must be started with inevitable changes?

[Answer] There is not a single clothing enterprise manager who is not bothered by the eternal question: am I manufacturing a good product at a good price and selling it in a good market. The government and party resolutions on the modernization of the product structure, as well as the stricter norms, require us to give equal importance to all three of these questions. But in medium-term planning it is still the development of the product structure that is the most important. And since all planning work

is built on the basis of the preceding period, I would like to say a word or two first about the Fifth Five-Year Plan.

The development of the clothing industry in the Fifth Five-Year Plan period can be divided into two phases. In the first 3 years we were still increasing quantity of production. In the past 2 years, we have restrained this process, and selection has been emphasized in order that we might prevent a greater worsening in the terms of trade and improve profitability. We sell domestically one-half of the products of the clothing industry, and one-half we export. Our products are bought by 80 different countries, and the world market influence can be sensed in both enterprise and industry management. In the first half of this year we overfulfilled our plans for exports to nonsocialist countries; and our domestic sales were also greater than planned. In this year--the base year of the Sixth Five-Year Plan--we have strengthened our market situation and the position of our enterprises, but we know that we can maintain this only with further efforts.

It is a fact that in the Fifth Five-Year Plan we wanted significantly to increase the production of wool and silk fabrics, and shoes. We kept modifying our ideas for 2 years, because in this field the commodity relations with regard to materials and finished products are not favorable. We will not be able to change this in the Sixth Five-Year Plan either. And let me draw attention to the fact that in the Sixth Five-Year Plan we will not limit the branch, but only the production of inefficiently made goods. It is a basic change: that in order to meet the plan goals we will not make use of investments but of cost-saving development methods (for example, organization and cooperation). We estimate that for the production of the same quantity of goods we will have less manpower available, but because of the efficiency requirements themselves we will be hiring fewer workers, and we will also be reducing the number of nonworker positions.

[Question] How will the sub-branch manage with the product change? How will the earlier programs be graded, that is, what ideas will have to be changed, and what areas will these affect?

[Answer] The work of the clothing industry is dictated by style; in adjusting to the seasons, it alters the product structure twice, and every 3 or 4 years it changes it completely. It is an economic disadvantage that we must import 80 percent of our materials, but in the rapid change of products this is an advantage. We can more freely and readily select raw materials for a given altered product structure than countries that are self-sufficient. Of course, this does not mean that all old products are unmodern or all new products are modern. There is still much to do in this area. In the Sixth Five-Year Plan it will remain a central task to speed up the modernization of products.

In 1979 our enterprises prepared strategic plans for the modernization of the product structure. In accordance with the new prices, the new price mechanism, the market situation, and our efficiency, we have developed new

priorities. We shall examine in turn also the concepts of our more important industrial branches. That is, the enterprises and ministries will primarily correct the market, production and production development goals from the viewpoint of economy. For example, in previous years the Hungarian silk industry was not export-oriented. This situation has changed. Since the reconstruction, 63 percent of our fabrics are made on modern machinery. In 1979 it developed only half as many new products as in 1977, but much more successful ones. With a Swiss license we introduced five new goods in 40 new patterns and solved the problem of finishing nonshrinkable lining. We have begun making moisture-absorbent blouse material from synthetic materials, and light weight curtain and drapery materials, which for a long time were in short supply, are now available in stores. On the other hand, we looked in vain for stylish corduroy and velvet. Imports have declined and the customers are complaining. To meet the demand, the manufacturing firm, the Cotton Textile Works, has modernized, and the corduroy supply has improved. But demand has grown faster than our development possibilities--this year, for example, the furniture industry alone uses as much corduroy as the domestic trade puts on sale--and therefore the supply is still not free of disruption. We ease the shortage to an extent with less expensive, stitched corduroy.

In the Sixth Five-Year Plan we can and we must overtake the modern manufacturers. To do this, we have asked the enterprises to broaden their selection, pay closer attention to the demands of the buyers, and carry out product developments more rapidly. It is not necessary for us to act in isolation, for we are stimulating the production development of the fabric-producing enterprises, the ready-to-wear, the knitwear, and the thread manufacturing, shoe manufacturing and leather industrial enterprises. In this collaboration there are many possibilities and important potential reserves.

[Question] How do the profits of the sub-branch stand as we approach the threshold of the Sixth Five-Year Plan? Will there be elimination procedures, and in which enterprises, despite all intervention attempts, has it not been possible to put management in order from the financial point of view?

[Answer] The five-year plans have always been accompanied by changes in the economic regulators. This is how it stands now too. It is an advantage that we have already introduced in 1980 the regulators for the Sixth Five-Year Plan. After the trial year, we shall see where it needs correction and in what respect when the medium-term plan is started. It is well known that the regulation introduced in 1980 substantially altered the profit situation of the individual industrial branches and enterprises. For example, the profits of the home textile enterprises declined by about one-tenth, while those of the leather factories increased several fold.

But lower profits as a whole have put into a difficult situation a number of enterprises and industrial groups (for example, the wool industry enterprises) the exports of which were not efficient enough, and which must now also balance their large-scale development debts incurred in the past years.

On the basis of 1979 results, we have found, together with the Ministry of Finance, 12 low-efficiency enterprises, and recent investigations show that six of these have successfully carried out the plan measures; they have assured management conditions for 1980, and there is no need for central measures. We are continuing to examine the management of the six remaining enterprises, because it is expected that in 1980 they will have fund-shortages or deficits. We will not permit the consequences of weak management to be prolonged for years and deficits to be repeated--for this reason it may be expected that the affected enterprises will be eliminated.

And still we may say that the vast majority of the enterprises not only understand the requirements of the new regulators very well, but adjust to them better all the time. This is shown by the fact that the results of the first half year are better than we estimated on the basis of the first quarter.

[Question] Finally, outline for us the perspectives of the sub-branch, with particular regard to the changing world market conditions system which is sometimes favorable. Is the plan for the branch's Sixth Five-Year Plan period ready? And in its main outlines, what does it include?

[Answer] The most important fact is that in the next decade the population will expect at least as many goods as nowadays. But they will ask for better quality and more style. Basically, this defines the future of the clothing industry. We can rest assured about the contracts as well: the international agreements for the Sixth Five-Year Plan period have already been signed with the socialist countries, and according to these our shipments will not be decreased. We are planning an increase in our nonsocialist exports, counting on a world market situation that will make this possible.

The development of the knitwear, ready-to-wear, dry goods and leather goods industry will be faster than average, although we will decrease somewhat our cotton thread production. We shall try to produce a better, finer thread than now. Meanwhile, the knitting and weaving industry that uses 25 to 30 percent of the wool fibers. In the wool fiber industry we are creating the conditions for the spinning of special pattern fibers and the full processing of Hungarian wool; we are producing more and better carded fabrics; and we are seeking to bring about--on the basis of the resolution by the Council of Ministers--a significant improvement of quality in the shoe industry.

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BRIEFS

NATURAL GAS IMPORTS--Though Poland, with a production of 18.5 billion cubic meters of gas, occupies 15th place on the list of the world's largest producers, the foreign deliveries of that raw material grow from year to year. At present, we import nearly 4 billion cubic meters of natural gas, which consumes 860 million foreign exchange zlotys, and this is the seventh item, from the standpoint of expenditures, in our imports. Whether or not the economy will feel the marked progression of expenditures for this purpose depends on the development of our own production of the native gas deposits exploration, and also on the further cooperation in the development of the extraction support base of the chief supplier of gas in our country. [Excerpt] [Warsaw SLOWO POWSZECHNE in Polish 22-23-24 Aug 80 p 9]

CSO: 2600

LOW PRICE REDUCES SUGAR BEET ACREAGE, PRODUCTION

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 30 Aug-1 Sep 80 p]

[Excerpt] This year the sugar beet harvest will soon begin under slightly unusual circumstances. There are no longer the problems that existed for several years of large reserves of sugar and inadequate storage space. Now it is a question of insufficient acreage having been planted in sugar beets at a time when the Yugoslav sugar industry has increased its production capacity.

This year, in addition to the 18 existing sugar mills, new sugar mills in Ormoz and Bijeljina will begin operating, and test production will begin at the sugar mill in Virovitica. Repairs in sugar mills have been completed, so that all 20 are fully ready for the coming campaign. At present the market situation at home and abroad is also very good.

But sugar beet production is stagnating. According to the "Jugosecer" business association, only 128,000 hectares were planted in sugar beets this year but some of this was destroyed by bad weather, so 126,495 hectares remained.

The situation is especially bad in Macedonia and Kosovo and this has been the case for several years. As a result, the mills in Bitolja and Pec will not be able to meet even one-half of the need.

At the moment the status of the sugar beet crop is satisfactory. Thanks to favorable weather conditions, a good sugar content is expected. If the weather continues to be favorable and a sugar content of 13.2 percent is attained (as last year), 5.6 million tons of sugar beets could be produced (compared to 5.8 million tons last year), which would yield about 740,000 tons of sugar, or the amount needed to meet domestic market demand. (In addition to the lack of sugar beets, sugar mills still are in need of sugar bags for packing.)

The cause of all this misfortune is the price disparity between sugar beets and grain, primarily wheat. This year's price of 0.70 dinars per kilogram

has obviously not been an incentive for increasing production. During the planting period itself, the price was seen to be so low that sugar factories were forced to raise it to 0.90 dinars per kilogram. Even so, 1,300 hectares less were planted than last year.

In 1976 the price ratio of wheat compared to sugar beets was 1:3.8, while this year 4.60 dinars were paid for a kilogram of wheat and 0.70 dinars for a kilogram of sugar beets, bringing the ratio to 1:6.6. "Jugosecer" considers it necessary to return to the ratio of 1976 in order for installed capacities to be utilized.

CSO: 2800

CROP CHANGES PLANNED IN MACEDONIA UP TO 1985

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 23-25 Aug 80 p 6

[Article by G. Dimovska: "Optimum Guidance"]

[Text] In every development program to date of the Socialist Republic of Macedonia considerable attention has been devoted to agriculture, which is no accident, since more than a third of the total population derives its living from farming. Moreover, the climatic conditions for a particular product signify an advantage over other parts of the country, and the time has passed when Macedonian farmers were by and large producing in an unorganized way to meet their own needs. Today their basic production orientation is to produce for the market, taking advantage thereby of comparative advantages and giving preference to products on the basis of the income they bring. That is why there is the steady switchover from grain to vegetable and industrial crops in terms of area planted.

Industrial crops offer Macedonian agriculture a good future, especially because over the last several years so to speak all the necessary prerequisites have been provided for their intensive development. Irrigation systems cover 130,000 hectares of arable land. The private and socialized sectors of agriculture already possess about 15,000 tractors, and the climatic conditions, assuming intensive irrigation, are better than favorable to these crops.

Over the last 5 years agricultural combines and private farmers have been paying the greatest attention in their development plans to industrial crops. According to their estimates, procentual increases in output between 1979 and 1985 would be about 140 percent for sugar beets, 91.3 percent for sunflowers, 259 percent for poppy seed, and 110 percent for cotton.

We should emphasize that results of this kind would be achieved by increasing the area planted to these crops, but also by raising yields, assuming better collection of seed material, more intensive application of scientific soil and crop practices, mechanization, etc. It is also very important that the food processing industry expects a great deal from the development

of industrial crops; at present, because of the lack of sugar beets and sunflowers, it is compelled either to use only half of the existing production capacities or to make up the shortages to some extent by importing related crops. Soybeans are an example of this.

The Promise of Cotton

As for cotton, the situation is specific. In spite of the expected and obvious increase in its production over coming years, the textile industry in the country cannot count on any sizable substitution of imported cotton by domestic cotton, since the analyses made to date have established that we cannot expect any major increase in cotton production, and the reasons are objective.

The region of Macedonia has a geographic position which allows for this crop to be raised successfully. In the well-known regions where cotton is raised, such as Pakistan, India, Egypt, Sudan, the southern portion of the USSR and certain other countries, as many as three harvests are taken annually. There the average annual yields are between 2,800 and 3,000 kg per hectare, while in the socialized sector in Macedonia they rarely exceed from 1,200 to 1,500 kg. In the private sector the average yields range about 800 kg.

Given this situation, the producers have calculated that their cost price is about 21 dinars per kilogram, and everything below that would in practical terms signify a loss. Today the support price per kilogram of first-class cotton is 13 dinars, and 14.30 dinars is paid on the market. In practice, however, second-grade cotton is the most common, and its price is 2 dinars less per kilogram than the first grade, so that the question is how to increase production over the next 5 years.

The producers are counting on higher yields and also rises in both world and domestic cotton prices. That is why they plan an increase from the present 1,579 hectares, producing 1,420 tons of cotton annually, to 3,000 hectares planted to this crop in 1985, and an annual output of 3,000 tons. Yet this amount is enough to meet the needs of one medium-sized spinning mill.

A More Favorable Situation for Sunflowers and Sugar Beets

The prospects for sunflowers are considerably better. Today they are being raised on 20,942 hectares, and another 11,000 hectares will be added over the next 5 years. If we take into account the planned rise of the yield per hectare from the present 12 quintals to 15.6 quintals per hectare, then we see why a total annual sunflower output of about 50,000 tons is expected in 1985. This is actually the amount needed by the Blagoj Djorev Mill in Titov Veles if it is to produce vegetable oil and margarine at full capacity.

A definite guarantee to fulfillment of the plan is that firmer cooperation has recently been established between this mill and sunflower producers. They are undertaking relations based on shared income and sufficient incentives for the production of this crop. Macedonian sunflower producers judge that production could increase still more dynamically than called for in the development plan, since the potential in terms of yields is very great, especially since the region with the greatest capability for sunflower production, the Pelagonian Basin, will in a few years have the Strezevo, the largest irrigation and drainage system in the republic.

The situation is similar with sugar beets. In 1979 it was planted on 3,454 hectares with average yields of 354.4 quintals per hectare, and the harvest was 115,575 tons. Five years later the area planted to this crop should be 6,500 hectares, the yield should rise to about 420 quintals per hectare, and the annual harvest should be more than 250,000 tons of sugar beets. This production would give the 4 November Sugar Mill in Bitol a full guarantee to operate at full capacity. Which accounts for its all-out effort to encourage the farmers to produce more through additional incentives in the purchasing of beets, favorable credit terms, free seed, technical assistance, machinery and so on.

The development plan for the republic's agroindustrial complex also shows that private farmers will be devoting more attention to the production of poppy seed. In 1985 poppies are to be raised on 6,500 hectares, which is 3.5-fold more than in 1979. Of the total area planned together with the socialized sector, which is 8,000 hectares, the annual harvest should be about 5,600 tons of poppy seed. This will be a sizable base for the food processing and pharmaceutical industries.

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BRIEFS

HARD CURRENCY TO RAILROADS--All organizations of associated work which use the services of foreign railroads to export or import goods will have to pay for these services in foreign exchange beginning on 1 September. This is as stated at a 25 August press conference held at the Yugoslav Railroads, in accord with a FEC (Federal Executive Council) decision issued in July. Danilo Fogel, member of the business council of the Yugoslav Railroad Association, said that this decision means that he who creates foreign exchange obligations must also pay for them. It has been different up to now. The Yugoslav Railroads have paid for the obligations of others. Up to 1979 the railroads earned more foreign exchange than it spent, but last year because of the sudden increase in the number of users of these services it got into a difficult situation. Now when we are starting to apply the FEC decisions, users themselves will directly pay their foreign exchange obligations; this will contribute toward reducing imports, since up to now importers could import more goods because the transport costs were paid by others. Last year importers could import about $100 million more in this way. This [new ruling] will have little effect on [train] passengers who will continue to pay for their tickets out of the country in dinars, while the republic and provincial self-management interest communities for economic relations with foreign countries will provide the foreign exchange funds. Although the new system of settling foreign exchange obligations began to be applied on 1 July, only a few began to transfer foreign exchange to the railroad transportation organizations. Now everyone will have to do this, and sanctions are planned for those who fail to comply. [Excerpt] [Belgrade BORBA in Serbo-Croatian 26 Aug 80 p 14]

EXCESSIVE BUREAUCRACY--Where and how can one economize? In seeking the answer to this question one most often arrives at the problem of administration. In the estimate of many, administration has multiplied to such a degree that it goes beyond the possibilities of associated work and has become one of the limiting factors to further development of labor productivity, efficiency, and rational economic operation. Let us mention only the self-management interest communities where more than 41,000 are employed. No one complained that the number of persons employed in secretariats and professional services in sociopolitical communities [Federation, republics, provinces, opstinas] be reduced by this number as was proposed when the self-management interest communities were formed. Of course this is not the only

place where there is an overpopulation of administrators. At present 5,682 functionaries and other professionals are employed in the LCY, i.e. for every 300 members approximately, there is one "administrator." This number is growing from year to year; last year the number increased 5.4 percent over 1978 when there were 5,389 people employed in the professional apparat of the LCY. [Excerpt] [Pristina JEDINSTVO in Serbo-Croatian 19 Aug 80 p 4]

U.S. BANK CREDIT TO SPLIT--An agreement was signed in Split with one of the ten largest American banks, the Marine Midland Bank of New York, granting a $10 million credit to the Bank of Split for a period of 7 years (plus a 30 month moratorium). The credit will be used to finance investments already underway of account-holders at the Bank of Split. In the last 2 years this U.S. bank has granted over $25 million in long-term credits to pay for imported equipment. The bank in Split is also using $12.5 million in short-term credits which the New York bank granted to import producer goods and various consumer goods. The agreement was signed by C. Norman Hansen, vice president of the New York bank, and Jovica Kunac, director of the Bank of Split. [Text] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 27 Aug 80 p 12]

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